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SUPERIOR COURT OF THE STATE OF CALIFORNIA
3
                  FOR THE COUNTY OF SAN DIEGO
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    ______
                                          JCCP No. 4042
6
   Coordination Proceeding
    Special Title (Rule 1550 (b))
                                     ) DEPOSITION OF
    In re TOBACCO CASES II
                                    ) MICHAEL W. OGDEN,
8
    This document relates to:
                                   )
9
                                     )
                                               PH.D.
    California, et al. v. Philip

Morris, Incorporated, et al.,

Los Angeles Superior Court

Case No. 202
10
                                             VOLUME I
11 Los Angeles Superior Court
                                          PAGES 1 - 205
                                    )
    Case No. BC 194217;
12
    The People of the State of
13 California, et al. v General
    Cigar Co., et al., San Francisco )
   Superior Court Case No. 996780; )
14
15 The People of the State of
    California, et al. v. Brown &
16 Williamson, et al., San Francisco)
    Superior Court Case No. 996781; )
17
    The People of the State of
18 California, et al. v. Tobacco )
    Exporters, et al., San Francisco )
19 Superior Court Case No. 301631 )
    _____)
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2.1
                      TAKEN ON: Wednesday, July 12, 2000
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                      TAKEN AT: 550 West C Street, Suite 1440
23
                                San Diego, California 92101
24
                     REPORTED BY: Margaret A. Smith
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                                   CSR No. 9733
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2.7
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           Vail, Christians & Associates (619)544-8344
1 APPEARANCES:
2 FOR THE PLAINTIFF THE PEOPLE OF THE STATE OF CALIFORNIA
   AND AMERICAN ENVIRONMENTAL SAFETY INSTITUTE:
3
          Thorsnes, Bartolotta, & McGuire
           2550 Fifth Avenue, Suite 1100
           San Diego, California 92103
           (619) 236-9363
5
                BY: CHRIS R. HULBURT
6
    FOR THE DEFENDANT PHILIP MORRIS INCORPORATED:
7
          MUNGER, TOLLES & OLSON LLP
           355 South Grand Avenue, 35th Floor
           Los Angeles, California 90071-1560
8
           (213) 683-9100
9
                BY: PATRICK J. CAFFERTY, JR.
10
    FOR THE DEFENDANT PHILIP MORRIS INCORPORATED:
```

```
11
            SHOOK, HARDY & BACON LLP
           One Kansas City Place, 1200 Main Street
           Kansas City, Missouri 64105-2118
12
            (816) 474-6550
                 BY: JOHN A. HOLTMANN
13
14
     FOR THE DEFENDANT R.J. REYNOLDS TOBACCO COMPANY:
           WOMBLE, CARLYLE, SANDRIDGE & RICE
15
            200 West Second Street, P.O. Box Drawer 84
           Winston-Salem, North Carolina 27102
16
            (336) 721-3604
17
                  BY: NEIL D. KODSI
18
    FOR THE DEFENDANT LIGGETT GROUP, INC.:
          POST, KIRBY, NOONAN & SWEAT
19
           One American Plaza, Suite 1100
20
           San Diego, California 92101-3302
            (619) 231-8666
21
                 BY: JEFFREY P. LENDRUM
                  BY: DOROTHY JOHNSON
22
    FOR THE DEFENDANT BROWN & WILLIAMSON TOBACCO CORPORATION:
2.3
           KIRKLAND & ELLIS
24
           777 South Figueroa Street
           Los Angeles, California 90017
25
           (213) 680-8545
                 BY: SYDNE MICHEL
26
27
28
           Vail, Christians & Associates (619)544-8344
   APPEARANCES (Continued)
 1
 2
   FOR THE DEFENDANT BROWN & WILLIAMSON TOBACCO CORPORATION:
           SEDGWICK, DETERT, MORAN & ARNOLD
           One Embarcadero Center, Sixteenth Floor
 3
            San Francisco, California 94111-3628
            (415) 781-7900
                  BY: DIANE T. GORCZYCA
 5
 6
     FOR THE DEFENDANT R.J. REYNOLDS TOBACCO COMPANY:
           HOWARD, RICE, NEMEROVSKI, CANADY, FALK & RABKIN
 7
           Three Embarcadero Center, 7th Floor
           San Francisco, California 94111-4065
 8
           (415) 434-1600
               BY: DONALD F. MILES
 9
10
11
12
13
14
15
16
17
18
19
20
21
22
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	MICHAEL W. OGDEN, Ph.D.,		
BEING FIRST			
	EXAMINATION		
BY MR. HULBU			
Q		me	
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_	_		
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A A			
Q	When was the most recent?		
A	I really can't say. It's not been withi	n the	
	WITNESS Michael W. O NUMBER 579 580 581 582 583 584 585 586 587 588 QUES Vail, San Diego, C BEING FIRST BY MR. HULBU Q and spell it A W-a-y-n-e, O Q A Q A Q A Q A	E X H I B I T S NUMBER Curriculum Vitae, 11 pages 80 RJR ETS-Related Publications, 14 pages 81 Bibliography of Documents Relied Upon By Dr. Michael W. Ogden, 11 pages 82 Notice of Taking Expert Deposition of Michael W. Ogden, Ph.D., 4 pages 83 Amended Notice of Deposition of Defendants, R.J. Reynolds Tobacco Company (Michael W. Ogden), 7 pages 84 Expert Witness Declaration on Behalf of Philip Morris Incorporated, R.J. Reynolds Tobacco Company, Brown & Williamson Tobacco Company, 15 pages 85 R.J. Reynolds web page entitled "Tobacco Issues," 1 page 86 R.J. Reynolds web page entitled "Secondhand Smoke," 1 page 87 R.J. Reynolds web page entitled "Corporate Responsibility: Marketing," 1 page 88 R.J. Reynolds web page entitled "Tobacco-Specific Nitrosamines," 1 page QUESTIONS WITNESS INSTRUCTED NOT TO ANSWER PAGE LINE 79 24 Vail, Christians & Associates (619)544-8344 San Diego, California; Wednesday, July 12, 2000; 9:14 MICHAEL W. OGDEN, Ph.D., BEING FIRST DULY SWORN, TESTIFIED AS FOLLOWS: EXAMINATION BY MR. HULBURT: Q Sir, would you please state your full nated and spell it for the record. A Michael Wayne Ogden, M-i-c-h-a-e-l, W-a-y-n-e, O-g-d-e-n. Q You've given depositions before? A I've given depositions before. Sure. Q Approximately how many times? A Three or four sounds about right. Q When was the most recent?	MITNESS EXAMINED BY PAGE Michael W. Ogden, Ph.D. (Mr. Hulburt) 4 E X H I B I T S NUMBER DESCRIPTION PAGE To Curriculum Vitae, 11 pages 20 RR ETS-Related Publications, 14 pages 22 Bibliography of Documents Relied Upon By Dr. Michael W. Ogden, 11 pages 38 Notice of Taking Expert Deposition of Michael W. Ogden, Ph.D., 4 pages 36 Amended Notice of Deposition of Defendants, R.J. Reynolds Tobacco Company (Michael W. Ogden), 7 pages 36 Expert Witness Declaration on Behalf of Philip Morris Incorporated, R.J. Reynolds Tobacco Company, 15 pages 36 R.J. Reynolds web page entitled "Tobacco Issues," 1 page 138 R.J. Reynolds web page entitled "Tobacco Issues," 1 page 139 EXPERTISE AND AMERICAN STRUCTED NOT TO ANSWER PAGE LINE "Corporate Responsibility: Marketing," 1 page 170 QUESTIONS WITNESS INSTRUCTED NOT TO ANSWER PAGE LINE 79 24 Vail, Christians & Associates (619)544-8344 San Diego, California; Wednesday, July 12, 2000; 9:14 a.m. MICHAEL W. OGDEN, Ph.D., BEING FIRST DULY SWORN, TESTIFIED AS FOLLOWS: EXAMINATION BY MR. HULBURT: Q Sir, would you please state your full name and spell it for the record. A Michael Wayne Ogden, M-i-c-h-a-e-1, W-a-y-n-e, O-g-d-e-n. Q You've given depositions before? A I've given depositions before. Sure. Q Approximately how many times? A Three or four sounds about right. Q When was the most recent?

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last few months. So I would, say, maybe within the last
19
    year.
                All right. The three or four prior
2.0
21
    depositions, during what period of time is that?
               Over the last three or four years.
           Α
                Have you ever testified in court?
23
           0
                Yes.
24
           Α
25
           Q
                 How many times?
26
           Α
                 Three times.
27
           0
                And, again, give me some sense of the timing
28 of those.
           Vail, Christians & Associates (619)544-8344
                 Well, again, over the last three or four
1
    years.
3
                 I understand that you are currently employed
    by R.J. Reynolds Tobacco Company; is that correct?
5
                That is correct.
           A
6
                 What is your position with R.J. Reynolds?
           Q
7
                My job title is principal scientist.
           Α
8
           Q
                Are you within a particular department of
9
    R.J. Reynolds?
10
           A I am.
                 What is the department?
11
           Q
12
           Α
                Research and development.
13
           Q
                How long have you been a principal scientist
   at R.J. Reynolds?
                Two to two and a half years.
15
           Α
                 How long have you worked for R.J. Reynolds?
16
           Q
                 It would be 15 years in October.
17
           Α
18
                 MR. KODSI: And, Chris, let me just make
19
   sure. As you began asking the questions, that Dr. Ogden
20 has been designated both as an expert in this case and as
21 one of the company witnesses most knowledgeable on various
   issues. The part of the deposition that's taking place
    now is the expert deposition, just so we're all under the
23
24
    same understanding.
25
                 MR. HULBURT: Okay. Well, that was not my
26
    understanding, that there was some distinction to be made
27
    in the questioning.
28
                 MR. MILES: Counsel, I talked with Karen
           Vail, Christians & Associates (619)544-8344
    Frostrom of your office on Friday, and we specifically
1
    discussed procedures. It was her suggestion and mine, we
    both were in agreement. But I think it came at her
    suggestion, okay, that the deposition start with Dr. Ogden
5
    as the expert as opposed to PMK and that there be a
6
    distinction in the depositions between those two roles.
7
                 You're welcome to call her, but I'm sure she
8
    will verify that.
9
                 MR. HULBURT: Well, I'm not sure I even
10
    understand what that means so that --
                 MR. MILES: Well, as a PMK --
11
                 MR. HULBURT: To me, I don't see the bright
12
13
    line. I mean, I hear what you're saying, but I can
    certainly imagine a lot of questions where there's no
    bright line distinction. So I'm not quite sure how that
15
    really works in real life.
16
                 MR. MILES: Well, there are areas that he
17
    knows about and can discuss, okay, where he would not hold
18
19
    himself out as an expert. And -- but at the same time,
20 he's knowledgeable and he would be described as a PMK or
21 as a company witness but he's not holding himself as an
22
    expert in those areas.
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23 I don't know why I had a conversation with 24 Karen and we reached certain agreements if she's not going 25 to communicate them to you. 26 MR. HULBURT: Are you telling me that an 27 agreement was reached --MR. MILES: Yeah. 28 Vail, Christians & Associates (619)544-8344 MR. HULBURT: -- on this issue? 1 MR. MILES: Yeah. 2 3 MR. HULBURT: Or that R.J. Reynolds took a position which it conveyed to Karen? MR. MILES: No. I believe it was her suggestion. I know she raised the issue of logistically 6 7 how we were going to handle this issue. MR. HULBURT: Should I understand --8 9 MR. MILES: I would invite you to call her to 10 find out what happened on Friday. 11 MR. HULBURT: Should I understand that Mr. Ogden, then, is not being made available today as a 13 person most knowledgeable? MR. MILES: The procedure we agreed on -- if 14 you want to repudiate the prior agreement, okay, then we 15 can go off the record and figure out how to proceed 16 17 here. But it will entail the confusion that he will have to describe for you where he's answering a question as an 18 19 expert and where he's not answering it as an expert because he's not holding himself out in that capacity. That's the difficulty, and that's what Karen and I talked 2.1 about on Friday, is that from your perspective -- I think 2.2 this is really more for your benefit than for the witness's or for ours. 25 If you ask him some questions, he would have 26 to say to you I can't answer that as an expert. I'm not 27 holding myself out as an expert in that area, but as a 28 PMK, I can respond to the question. That makes it very Vail, Christians & Associates (619)544-8344 unmanageable for you. That was my clear perception of Karen's concern when I talked to her on Friday. And we had an agreement at the end of our 3 4 conversation that Dr. Ogden would appear first as an expert and then a second and separate deposition would be taken of him as the PMK. 6 7 MR. HULBURT: When is that? 8 MR. MILES: As soon as this one is done. 9 MR. HULBURT: Is any of that because of R.J. 10 Reynolds' inability or failure to produce documents related to his PMK designation? 11 12 MR. MILES: There is no failure to produce 13 documents. I object to that characterization. The reason 14 for the agreement is because Karen and I talked about it on Friday. And I do believe, if I recall correctly, it 15 16 was her proposal and her request that he appear first as 17 an expert. And I invite you, instead of asking me 18 suggestive questions that suggest that there's something being done by Reynolds here, to call your colleague, who 20 you had talk to me on Friday, to find out why she agreed to this and whether we did, to see what the rationale 21 22 was. If you'd like to go off the record and call her, 23 that's fine. 24 MR. HULBURT: Well, right now, I'm not even 25 interested in the rationale. The question that I asked 26 earlier was the real question. 27 Should I understand right now that Mr. Ogden

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is not being made available as a PMK?
           Vail, Christians & Associates (619)544-8344
                 MR. MILES: The agreement that I reached with
1
    Karen on Friday was that he would have his deposition
    taken first in his capacity as an expert and only as an
    expert, that as soon as that deposition was completed,
    that we would go back on the record and his deposition
    would be taken as a person being designated as the PMK so
    that he would not have to qualify answers that were
8
    appropriate questions to a PMK, by saying I'm only
    answering the question in this capacity, I'm not answering
9
    in that capacity, okay, which creates some awkwardness in
10
    the record and is something that Karen was clearly
11
12
    concerned about when she talked to me on Friday.
13
                 But he's here to give testimony as an expert,
    on one hand, and separately as a PMK designee. If it's
    your desire to do them all at the one time, then you need
15
    to talk to Karen about what to do with the agreement that
16
17
    she reached with me on Friday.
                 MR. HULBURT: I'm just -- I'm struggling with
18
19
    the notion that I will be able to draw a distinction in
    the questions that I ask or in the answers that he gives.
20
    I think in the abstract, I guess I understand the
21
22
    discussion. In real life, it's quite difficult for me to
    figure out when I will be asking an expert question and
23
    when I will be asking a PMK question. Some might be
    obvious, but some are clearly not obvious.
25
                 MR. MILES: Go call your colleague and
26
27
    express your concerns to her about what she proposed to me
28
    and what we agreed to on Friday.
           Vail, Christians & Associates (619)544-8344
                 MR. HULBURT: I don't think that will help us
1
    today. I'm the one who is going to ask the questions.
    I'm trying to understand what it really means in real life.
                 MR. MILES: Counsel, I need to know who I'm
5
    dealing with. If Karen is a separate operator and an
    agreement that I reached with her has no bearing on what
    you've agreed to and what your firm has agreed to, then I
7
8
    need to know that. I've already had the problem on at
9
    least one occasion --
10
                 MR. HULBURT: You don't need to challenge the
11
    agreement.
                 MR. MILES: But you're challenging the
12
13
    agreement.
14
                 MR. HULBURT: No, I'm not. I'm going to
15
    attempt to put the agreement in effect.
                 MR. MILES: All right.
16
17
                 MR. HULBURT: I'm being quite candid with you
    to suggest that the agreement is not as clear cut, at
18
19
    least as I understand it. It's quite difficult for me to
20
    know exactly which question falls in which category. I'm
    just saying that, to me, is a real life dilemma. And you
21
22
    need to deal with me on that because I'm the one who is
23
    going to be asking the questions. So I'm thinking through
    the agreement with you, and I'm acknowledging to you, that
25
    to me, in real life, it's going to be more complicated
    than it sounds in the abstract, describing the agreement.
26
    I'll do the best I can do. I'll ask questions, and we'll
27
28
    see what happens.
           Vail, Christians & Associates (619)544-8344
                                                                10
1
                 But I don't know that I will know, in my own
    mind, whether the question that I'm asking is an expert
    witness question or a PMK question or whether it's both or
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whether they overlap or whether the answer calls for part from one category and part from the other category. I 5 don't know that any of us will know that distinction. You 6 7 know, it's kind of an abstract thing until we get to it, I 8 think. 9 I'm not trying to repudiate any agreement 10 that was discussed or made between the parties. I'm just -- I mean, I think if we all were candid about it, 11 we'd have to acknowledge that that's not as quite a 12 clear-cut bright line as the agreement makes it sound. 13 14 So, I mean, I don't know what to do about 15 that. That's why I was trying to -- I was seeking a bright line thing from you. 16 17 Is he made available now as a PMK? It sounds 18 like, yeah, he is. 19 Is he made available now as an expert? Yeah, 20 he is. 21 MR. MILES: I don't think I understand your 22 "is he made available now." He's here physically. The difficulty with roles is that there are areas where he has 23 24 knowledge, as any person does, where they don't hold themselves out as an expert. Okay. I have some knowledge 25 on chemistry. You do also. I don't hold myself out as an 26 27 expert chemist. 28 If you were to ask me what I know in that Vail, Christians & Associates (619)544-8344 11 area, I could tell you, but if you were taking my deposition as an expert, I would have to say I'm not holding myself out as an expert in that area. That's the problem. Okay. And that's the difficulty with the bright 5 line, because in his capacity as an expert, he has to draw that line and say that's not an area where I hold myself 6 7 out as an expert. And that's the reason to have the bright line be at the beginning of the deposition as opposed to having 9 10 to be drawn all the way through with two different links, 11 because there are some areas where he would say, yes, I have knowledge. I have information that's responsive, but 12 I don't hold myself out as an expert there. And the 13 14 difficulty is that if you take the deposition 15 simultaneously in both capacities, he has to give you, in 16 essence, two different answers at the same time. 17 And the concept was it would be easier to 18 have him appear as an expert first and then to have him 19 appear as a PMK. If you want to change the agreement, 20 then let's discuss that. We don't need to keep on the 21 record on this. 22 MR. HULBURT: Let me just interject. I know you're not finished, and I'm not trying to interrupt you. 23 24 As an expert, he knows everything that he knows as an employee of R.J. Reynolds, which -- all of 25 which presumably also is what allows him to be the PMK on 26 27 the issues that he's designated. 28 So the whole thing is overlapped because his Vail, Christians & Associates (619)544-8344 knowledge as a PMK is the same knowledge that he has as an 1 expert. 3 So, in my mind, to me, the whole thing is overlapped. And I cannot figure out how to ask questions 5 that would only ask him for an expert -- on the basis of 6 an expert opinion, that would have nothing to do with his 7 PMK status as a 15-year employee of R.J. Reynolds, because, obviously, that's an artificial distinction.

9 MR. MILES: First of all, I just really don't 10 understand why you have somebody from your office call me, 11 propose a procedure, and then you walk in and say you know 12 nothing about the conversation, quarrel with the procedure that was proposed, suggest that somehow it's my fault that 13 14 this procedure was agreed to, hint that I'm trying to do 15 something inappropriate, and then suggest that we don't --16 that you don't want to follow the procedure. 17 I don't know what I did on Friday and why I 18 had that conversation, why I even took the phone call from 19 your office to have a conversation and agree to a procedure and then have you come in and attack me for 20 having done that. 21 22 MR. HULBURT: I'm sorry that you feel 23 attacked. MR. MILES: I don't understand why you're not 24 aware of the phone call, and I would invite you to explain 25 that because I'm dealing with your office under the 26 27 expectation that when I deal with Karen, that I'm dealing 28 with the firm and I'm dealing with all of you. When it's Vail, Christians & Associates (619)544-8344 13 becoming apparent to me that when I deal with Karen, it's got nothing to do with dealing with you or Mickey, that 3 you don't even talk to it, apparently. I went into court yesterday and had 5 Mr. McGuire suggest that I never agreed to produce any 6 witness where I had a conversation with Ms. Frostrom where we specifically agreed and conferred in writing, in fact, 7 8 that Dr. Ogden was going to appear today. 9 So I don't understand exactly why I had the 10 call on Friday or why I'm being attacked here for telling you of an agreement that your office proposed and I agreed 11 12 13 Now, if you want to do a different type procedure, then let's go off the record and you tell us 14 15 what the procedure is you want to do, and we'll come back on the record and say what it is. But I'd like to 16 consider what the procedure is going to be. But I would 17 invite you to call your office to find out why it is they 18 19 proposed something different rather than suggesting that 20 my agreeing to it somehow was inappropriate. 21 MR. HULBURT: Don, I don't know why you feel you're being attacked. I don't know why you feel that 22 23 I've suggested you've acted inappropriately. I've tried 24 to tell you candidly that I'm trying to understand the 25 shades of gray in the agreement so that I can put it into 26 effect. 27 I've told you I'm not trying to repudiate any 28 agreement. I've asked you what I think are substantial Vail, Christians & Associates (619)544-8344 14 objective legitimate questions about the agreement which have to do with real life, how are we going to go forward. 3 You perceive that as an attack. I'm sorry about that. It's not intended as an attack. I'll tell you the purpose of the phone call was because we believed that we were not receiving 6 7 documents for Mr. Ogden's deposition as a PMK. And would 8 we have documents before the deposition goes forward. And if we don't have documents before the deposition, what do 9 10 we do. I understand that it was R.J. Reynolds' 11 12 position that if we took the deposition as a PMK without 13 the documents and documents came later, that we would not

14 be allowed to do it again. That's of great concern to me and something to which I will not agree. 15 16 So I understand that part of the conversation 17 was in that context and for that reason, from my office's 18 perspective. 19 I am aware that there was a discussion about this idea that somehow we try to do it in pieces. I'm 20 trying to discuss with you objectively, candidly, not even 21 adversarially, what the hell does that mean, Don. 22 MR. MILES: Okay. If you're aware of the 23 24 conversation on Friday -- okay. Are you aware of the 25 conversation and the agreement on Friday, first of all? 26 MR. HULBURT: I'm aware of the conversation 27 and the issue. MR. MILES: Okay. Were you aware --28 Vail, Christians & Associates (619)544-8344 15 MR. HULBURT: I don't dispute --1 MR. MILES: Were you aware of this agreement 2 before you came here today? MR. HULBURT: I was aware that it was --5 quite candidly, I was aware and I believed -- this might have been in my own mind, I believed that it was R.J. 7 Reynolds' suggestion that we somehow try to separate these 8 things. I don't think it matters who suggested it, and I'm not going to argue with you about whether we suggested 9 it or you've suggested it. I accept what you've said about it. I accept everything that you've said about it. I've not argued with you at all this morning, although you 12 feel attacked. I've not even tried to argue with you. 13 I'm simply trying to understand the reality 15 of this agreement, and I think I've raised at least a couple legitimate questions which you've not engaged in any thought process with me, like the idea that as an 17 expert he knows everything that he knows as the PMK and so it's very hard for me to see the distinction in those 19 20 questions and hard for me to decide am I asking an expert 21 question or am I asking a PMK question because the knowledge base will be exactly the same. 22 23 You gave me an example. He might say he's 24 not an expert on some issue. I accept that. Every expert does that, and I expect him to draw the borders around his 26 expertise. I accept that. I don't think that's unique. I don't think that has any special scenario. 27 So, I mean, I -- I'm not arguing with you at 28 Vail, Christians & Associates (619)544-8344 all. I'm only trying to understand in real life at the 1 moment what are we really talking about? What does it really mean? I don't think that calling Karen will help me. She could recite the agreement as accurately as you did. That doesn't help me understand what it really means. I need to understand what it means, here, now. 7 I'm asking you for that. 8 MR. LENDRUM: Should we go off the record? 9 MR. MILES: Yeah. I'm a little mystified 10 why, first of all, if you knew about the agreement, why you acted as you did and acted to draw it to our attention 11 on the record, and, secondly, why you're insisting on 12 13 having this conversation during the course of the 14 deposition and putting it on the record. 15 MR. HULBURT: I don't care if it's on the 16 record or not. We can go off the record. The 17 conversation originated with Neil. He's been quiet ever 18 since then. It originated with Neil. It caught me off

guard because I was asking a basic set of introductory questions which I think applied whether he's the PMK or expert. You were trying to say it before I started. 21 22 That's fine. We didn't do anything wrong. So we got into it. It's the first thing we talked about. I didn't 24 expect to talk about it right now, but we are. If you want to go off the record, we can go off the record. 25 MR. MILES: All right. Let's go off the 26 27 record. (Discussion off the record.) 28 Vail, Christians & Associates (619)544-8344 17 MR. KODSI: We're back on the record, and we, off the record, reached an agreement that the 2. 3 deposition will proceed, at least initially, as an expert deposition of Dr. Ogden in his role as an expert in this 5 case. 6 At the end of the day, after we get the real 7 time transcript, we will go through with Mr. Hulburt, and me and Don Miles, and if there are questions that 9 Dr. Ogden gives in his expert capacity that also fit within his capacity as a person most knowledgeable, we 10 will stipulate to those so that we will save Mr. Hulburt 11 the time of having to re-ask those questions when he 12 13 deposes Mr. Ogden in his capacity as person most 14 knowledgeable. 15 That's at least my understanding of the agreement, that the deposition from this moment, forward, 16 until it's ended and moved to deposition No. 2, will 17 18 proceed as an expert deposition. 19 MR. HULBURT: That's my understanding also. 20 BY MR. HULBURT: 21 Q Let's see. What did I get from? You've got that you have been the principal scientist for two, two 22 23 and a half years. You've worked for R.J. Reynolds 15 -or what will be 15 years in October. 24 25 And so I think I must have been asking what 26 does it mean to be a principal scientist at R.J. Reynolds. A Okay. In your recharacterization, you said I 27 was the principal scientist. That's not quite true. 28 Vail, Christians & Associates (619)544-8344 18 There are more than one. I'm one principal scientist. I understood that. Thank you. 2 Okay. A principal scientist is one of a 3 number of rungs of a technical ladder that one can be promoted to. It is a fairly high level within the R&D organization. The principal scientist designates $\,$ 5 6 7 someone -- that someone has a number of years of experience and is recognized as an expert in certain areas 9 and has amassed technical credentials worthy of that level of promotion within the organization. 10 11 Q What are the levels that would be above a 12 principal scientist? 13 There is only one currently, and it is senior 14 principal scientist. 15 Q And what are the levels below principal 16 scientist? That's a difficult question to answer because 17 it gets a little bit confusing, but the level immediately 18 19 below principal scientist would be master scientist. 20 Then, as you progress backwards, there would 21 be a level called senior staff. That generally wouldn't 22 be scientist. That would be a particular specialty like senior staff, chemist or senior staff, toxicologist or 23

```
24
    something designating the particular area of expertise.
25
                 Working backwards, then, there would be
    senior whatever, senior chemist. And working back from
26
27
    that would just be R&D chemist or R&D toxicologist.
                 That, really, would be the professional
28
           Vail, Christians & Associates (619)544-8344
                                                               19
    ranks. There are many more below that that designate
    nondegreed people, people with bachelor's degrees, ETS,
    and there are many more below that.
                When you started at R.J. Reynolds
           Q
 5
    approximately 15 years ago, what was your position?
                My entry-level position was R&D chemist.
 7
                 And what did you -- how long were you an R&D
 8
    chemist of R.J. Reynolds?
           A My C.V. will reflect that more accurately,
 9
    possibly, than I can remember, but I would say, if memory
10
    serves, three or four years.
11
12
                All right. I'll mark what I have as
13
    Exhibit 579, which is a copy of a C.V. dated March 1997.
    We have had some discussion off the record that you
15
    probably have a more current C.V. This is the only one I
    have and the only one I've been able to locate.
16
17
                 (Exhibit 579 was marked for identification.)
18
    BY MR. HULBURT:
19
                 Is -- let me ask you about that first.
20
                 Is there a more current C.V. that you have
21
    prepared at some time?
22
                I recall one specifically dated July 1998. I
    believe that is the most recent one that I've prepared.
23
2.4
           Q Would the July 1998 be the next one after
25
    this March '97?
26
           A I'm not sure.
27
           Q Can you tell me what additions, deletions,
    changes would need to be made to March '97 to make it more
28
           Vail, Christians & Associates (619)544-8344
                                                               20
    current today?
1
                 Well, there would be no deletions. There
    would simply be a chronological progression and addition
 3
    of certain things. Probably in the area -- well, in the
 5
    areas of publications and presentations, there may be some
    additions. I can check real quick in terms of the
 7
    professional experience.
 8
                 Yes, this one shows the current level as
    master scientist. So there would be an addition there
 9
10
    that would reflect promotion to principal scientist.
11
    That's about it.
12
                So in addition to changing your title from
13
    master scientist to principal scientist, there would be
    additional publications and presentations?
               Any that were made would have been added to
15
16
    the C.V., yes.
17
            0
                 Right.
18
                 Would there be additional publications and
19
    presentations relating to the subject of secondhand smoke
20
    or environmental tobacco smoke that are not reflected on
21
    this March '97 C.V.?
                 I'll take a moment to review it.
22
           Α
23
           0
                 Sure.
24
                 Yes, there would be some addition.
           Α
25
                Could you tell me what they are.
           Q
26
                 I'll do the best I can.
27
                How many additional publications are we
           Q
28
    talking about?
```

```
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                 MR. KODSI: Chris, let me just interrupt
1
    because this may make this easier. We also were provided
    yesterday with a document that looks like this, an RJR ETS
    bibliography. I don't know if you have that with you.
5
                 MR. HULBURT: Right. I've seen this.
                 MR. KODSI: That would contain all of
7
    Dr. Ogden's articles up to, I think, last month that would
    not be on his C.V., because that's a bibliography for the
8
    entire company. So that may help you.
9
10
                 Now, obviously, all those articles won't
11
    start with Ogden because he's not the first author on
    everything. But if you want to show that to the witness,
12
    it may make it easier for \mathop{\text{\rm him}}\nolimits to answer the question and
13
14
    move along a little faster.
15
                 MR. HULBURT: All right. That's good.
    Let's mark this as Exhibit 580, which is a document
16
17
    entitled "RJR ETS-Related Publications."
18
                 (Exhibit 580 was marked for identification.)
    BY MR. HULBURT:
19
20
                 Is that a document that you have seen before?
           Q
                 Yes. This is a document that I created.
21
               What was its purpose? What were you
22
           Q
23
    intending to put into this document, Exhibit 580?
           A I was intending to put into this document
24
25 publications that were co-authored by R.J. Reynolds
26 scientists and engineers that are responsive to
    environmental tobacco smoke research and publications.
27
28
                 It's dated on the first page down there.
           Vail, Christians & Associates (619)544-8344
                                                                22
                 What does it say, June 30th?
1
2
                 Last date is 6/30/00.
3
                 All right. Does this document then include
    all of the articles that would be added to your C.V.
    following March 1997 to make it more current?
                 Yes, it should.
                 Does this -- Exhibit 580, does it include
7
           0
    presentations that would be added to the C.V., or we're
8
    really just talking about publications?
9
10
           A
                No. This does not include presentations. It
11
    is just publications.
           Q All right. Can you, maybe by number, just
12
    tell me the article number of Exhibit 580 what should be
13
    added to your C.V. to update the publication list in the
14
15
16
                Sure. Let me run through it just line by
    line to make sure I don't miss any.
17
18
                 Okay. There's one that strikes me right off
   that's actually missing from both of these, and it's very
20
    recent. It's similarly entitled to No. 59 in document
21
    580. The title on 59 is "Method for Calculating
    Olfactometer Output, Part 1, Acetic and Propionic Acids."
22
23
    There is a companion Part 2 of that that has just been
24
    accepted for publication. So it should be in my C.V. as
    in press.
26
                 It has been accepted for publication by what
           Q
27
     journal?
28
                 The Analyst.
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                                                                23
1
                 The same as Part 1?
2
                 Not exactly, no. It's a sister publication.
           A
3
           Q
                 Is The Analyst a peer-reviewed journal?
           A
                 Yes, it is. It's one of the journals of the
```

Royal Society of Chemistry in the UK. 6 Okay. Here's another one that should be 7 added, which is No. 69 in document 580, that Nelson is the first author, "Composition of Environmental Tobacco Smoke from International Cigarettes Part II: Nine Country 9 10 Follow-Up." The Part I to that is in my C.V. and also in 11 this document 580. And that was published in '97. 12 Here is an additional one, No. 106 in 13 document 580. Ogden is the first author. "Effect of 14 Lighting and Storage Conditions on the Stability of 15 Ultraviolet Particulate Matter, Fluorescent Particulate 17 Matter, and Solanesol, "published in 1998. 18 Here's an additional one that's No. 134 in document 580. Smith is the first author. "Tobacco 19 20 Smoking and Atherosclerosis," is the title, published in JAMA in 1998. 21 22 That's all that I see from document 580 that 23 should be added to my C.V. to bring it up to date for 24 publications. 25 Are there any more articles like the one 26 you've mentioned that's going to be in The Analyst that 27 you think don't show up on either list but that you think 28 should be added to your C.V.? Vail, Christians & Associates (619)544-8344 24 1 No, there's nothing that I can recall that is -- that has been published or accepted for publication that should be on those lists. This is a complete accounting, to the best of my recollection. 5 Are there additional presentations that you 6 would add to your C.V., Exhibit 579, to make it more 7 current? 8 A Yes. 9 Give me some estimate of the number, total 0 10 number. 11 Probably about four. All right. Can you tell me what they are?
I can try. There would have -- oh, no. It's 12 13 Α on there. Sorry. The presentation I was expecting --14 15 okay. There were two -- there were three presentations that were made in '99 that I know should be added here. 17 Two of them were virtually identical, just presented in two different -- at two different meetings. 18 19 There would have been a presentation on determination of NNAL in smokers' urine that would have been presented at 2.1 the 1999 Tobacco Science Research Conference and also at the CORESTA Smoke and Technology Meeting. 22 23 O The same presentation, two conferences? Α That's correct. Virtually identical 25 presentations. 26 Q Okay. 27 Α There may have been slight differences, but 28 nothing substantive. Vail, Christians & Associates (619)544-8344 25 1 Okay. 2 There was also -- oh. There was also a presentation that reminds me of another publication that I don't believe is on the list. Let me check that just to 5 be sure. 6 Sorry. I believe I missed a publication. 7 Can I pick that up while it's on my mind? 8 Q Α No. 94 in document 580 is a book chapter.

```
Ogden is the first author. "Nicotine in Environmental
    Tobacco Smoke." It was published in a book in 1999. That
11
12 should be added as well.
13
                There would have been a derivative
14 presentation, oral presentation, made of the contents of
15
    that book chapter that would also have been presented at
    the 1999 Tobacco Science Research Conference. And that's
16
17
    all that comes to mind right now as far as presentations
    between 1997 and today.
18
19
                 All right. Thank you.
20
                 Have we then covered everything that we would
21 need to do to update the March '97 C.V.? We've got you
    with your correct title. We added articles, and we added
23
    presentations.
           A Right. That would be the best recollection
24
    I can put forward on the additions to those three areas.
26
    Right.
27
               Okay. In your time at R.J. Reynolds, have
28
    you had any particular focus or emphasis in your work?
           Vail, Christians & Associates (619)544-8344
                                                              26
                 Yes.
1
2
                 What has that been?
3
                The study of environmental tobacco smoke.
           Α
           Q
                How long have you been involved in the study
   of environmental tobacco smoke?
5
           A Since I was hired in October of 1985.
                Had you ever studied environmental tobacco
7
   smoke before going to R.J. Reynolds?
8
9
           A
                No.
10
           Q
                All right. Does the -- the C.V. correctly
11 sets forth your education?
           A Yes, it does.
12
                 So from this, I can see that you got a
13
14 Bachelor of Science in chemistry at Emory and Henry
    College in 1980 and also a Bachelor of Science in applied
15
16
    mathematics at the same time; is that correct?
17
           A That's correct.
                And then continued your education at Virginia
18
           0
   Polytechnic Institute & State University to get a Ph.D. in
19
20 analytical chemistry?
21
                That's right.
           Α
22
                Was that continuous from '80 to '85 you were
23
    pursuing that study?
           A Yes. There was no lapse there.
24
           0
                All right. And then immediately upon
26
    completing your Ph.D., you went to work for R.J. Reynolds?
                That's correct.
27
28
                 Okay. Have you ever worked for any tobacco
           Vail, Christians & Associates (619)544-8344
                                                              27
    companies other than R.J. Reynolds?
3
                 Since completing your Ph.D. in 1995, have you
           0
4
    been employed by anyone at any time other than R.J.
5
    Reynolds?
6
                 MR. MILES: Counsel, did you say 1995?
7
                 MR. HULBURT: I don't know. I didn't intend
8
    to.
    BY MR. HULBURT:
9
           Q Since completing your Ph.D. in 1985, have you
10
11
    been employed by anyone other than R.J. Reynolds?
12
           A No.
13
                 Do you have any further formal education
    besides what's listed here on Exhibit 579?
14
```

```
No. I can't think of any. No formal
    education in terms of attending universities or taking
16
17
    classes that would be ongoing education from attending
    seminars and training classes that would be relevant to my
    field of work. But not in a university or an academic
19
20
    setting.
                 All right. As principal scientist at R.J.
21
    Reynolds, does that mean that -- as a principal scientist
22
    assigned to a certain issue or a certain study or a
23
    certain scientific field, or how is the -- how are the
24
25
    categories of principal scientists broken down at R.J.
    Reynolds?
27
                 Well, a principal scientist is not assigned
28
    to a certain field. A principal scientist -- or, rather,
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                                                               28
1
    I should say, a scientist is elevated through promotions
    to the level of principal scientist because of
2
    demonstrated expertise in a certain field.
3
                So they get there because of expertise in a
    field. They don't get there and then -- they're not
    assigned an expertise or an area to work in.
7
          Q Is your work as principal scientist any
    different than your work was as master scientist, or is it
9
     just a promotion and a change in title?
               My work is not substantively different.
10
11
    There would be increasing responsibilities in that role,
    but it is not a major change. It's more of an
    evolutionary change and not a revolutionary change.
13
                 What do you mean by that?
14
15
                 Well, it evolved a step at a time. So you
16
    move up the ladder, so to speak. There was not a dramatic
    change in job responsibility or reporting structure or
17
    anything else that accompanied the move from master
18
    scientist to principal scientist. It was just a step in
19
    what I would call the evolutionary chain of a professional
20
21
    career. It's not a major job change in any way.
          Q Are there any other principal scientists at
22
    R.J. Reynolds who are also focused on the study of ETS?
23
           A I'll have to reflect on that for a minute.
24
25
    There are other principal scientists in the R&D
    department. Undoubtedly, there are some that would have
27
    expertise in the area of ETS, possibly, or a tangential
    area, but there are none others that have principal
28
           Vail, Christians & Associates (619)544-8344
                                                               29
1
    responsibility in the ETS area.
2
           Q All right. Is there a senior scientist who
3
    is focused on the study of ETS at R.J. Reynolds?
           A When you say "senior scientist," do you mean
    in the senior chemist category that I gave you earlier?
5
6
           Q Senior principal scientist. I was trying to
7
    refer to the hierarchy above you.
                 Is there somebody above you or with a title
8
9
    above yours who is, like you, focused on the study of ETS?
          A No, there is not.
10
11
                Would you be the person at R.J. Reynolds,
12
    then, who has the highest seniority in the study of ETS?
                MR. KODSI: Object to the form to the extent
13
    the "study of ETS" might be a little vague. There might
14
15
    be specific issues within that.
16
                 But you may answer, Dr. Ogden.
17
                 THE WITNESS: There is no one else within the
18
    R&D organization who has an equivalent or higher technical
    title whose primary responsibility is the study of ETS.
19
```

20 And having said that, I may have lost track 21 of your exact question. 22 BY MR. HULBURT: 23 Q I think you answered it. 24 Α Okay. 25 Q Thank you. 26 Do you have other scientists and staff and 27 senior staff who are under you in the course of your study for ETS -- the study of ETS? Vail, Christians & Associates (619)544-8344 30 1 Yes. How many -- how many people fall into your group of your study of ETS at R.J. Reynolds? A Okay. The people that report to me, some of them do things in addition to ETS, and some of them do 5 things that are primarily not ETS. So my working group 6 7 does not only do ETS. So there are -- I'd have to count 8 up in my mind here. 9 I believe -- I would say that five people 10 working for me have done some work or currently do some work in the area of ETS. 11 12 Q Can you describe for me their positions, 13 their titles? 14 A Sure. 15 For instance, there are one or two 16 scientists, one or two staff. Can you give me that sort 17 of breakdown. A There is one senior staff pharmacologist. 18 There is one senior staff chemist. There is one chemist 19 2, which is a level below what we talked about earlier. 21 And there are two -- although they don't have the exact title, and I may not be able to quote them exactly --22 23 they're research technicians -- I think one of them -- let me restate that. One of them is a research technician, and one of them is a laboratory technician. 25 Your C.V., Exhibit 579, describes that since 26 Q June 1995, you've been a visiting professor of chemistry 27 28 at Virginia Polytechnic. Vail, Christians & Associates (619)544-8344 31 1 Is that still true? That is still true, yes. What are your responsibilities at Virginia 3 Q 4 Polytechnic? A number of years ago, R.J. Reynolds 5 6 established a post doctoral fellowship position with the 7 university, which I prefer to refer to it as Virginia 8 Tech. It's easier to say. But the correct name is, as 9 you've stated, Virginia Polytechnic Institute. 10 We established a post doctoral fellowship 11 position and funded that position. It is a named 12 fellowship position. It's the RJR Kurt Grob Memorial 13 Fellowship. In that capacity, we have funded three post 14 doctoral fellows, one of which worked at the university in 15 the professor's laboratory there. Two of those worked at RJR in the R&D department. One of those worked in my 17 laboratory. So as mentor of that post doctoral fellow, I 18 19 carry the title of visiting professor of chemistry. 20 During what period of time or for how long of 21 a time was that post doctoral fellow working under your 22 mentoring? 23 For approximately the previous two years, 24 and, in fact, he just left within the last month -- or

```
went within the last month to six weeks.
          Q Does being a visiting professor of chemistry
26
    at Virginia Tech involve teaching any classes?
27
28
           A No, it does not.
           Vail, Christians & Associates (619)544-8344
                                                              32
1
                 Okay. So it really have -- is having this
    fellow essentially doing a clinical internship in your
    lab; is that right? Maybe you don't like "clinical
    internship."
 5
                Clinical internship doesn't quite ring true.
           Α
 6
                 It is this fellow working in your lab under
    your supervision?
          A Right. This post doctoral fellow is an
 8
    employee of the university. And in this particular
 9
    instance, he worked in my laboratory all on research
10
11
    projects of mutual interest.
12
                 So in this instance, our particular
    laboratory was, in essence, a satellite laboratory of the
13
    university, which is a way many people choose to think of
    that. But the post doctoral fellow is an employee of the
15
16
    university, but he works full time in our laboratory. And
    I would be his mentor and supervisor.
17
18
               Have you had any other responsibilities as a
           Q
19
    visiting professor of chemistry besides this fellow that
    you've just described?
20
21
           A Well, yes. Slightly. In terms of
    administrative duties, I was the one who established and
    set up this program so I would be the liaison person
23
    between R.J. Reynolds and the university for establishing
24
    contracts, funding, you know -- processing additional
26
    funds into the program, any issues that may arise in terms
    of benefits or salary or promotions or things like
27
    that. But those would be just administrative duties in
28
           Vail, Christians & Associates (619)544-8344
    administering the program.
                Is there anything else that you would put in
    any responsibilities you've had through the program at
    Virginia Tech?
 5
                 Not that come to mind, no.
           A
                Have you testified as an expert witness
    before in deposition or trial?
 8
                Yes, I have.
           Α
9
                 Of the three to four prior depositions over
    three to four years, can you tell me whether those were
10
11
    expert depositions or in some other capacity?
12
           A The majority of those I would characterize as
13
    being expert depositions.
           Q Can you tell me the names of the cases, three
15
    to four cases, where you gave prior deposition testimony?
16
           A I can try.
17
           Q
                 Okay. Please.
18
           Α
                There was a deposition in the case I would
19
    refer to as Broin.
20
           Q
               How do you spell Broin?
21
                 B-r-o-i-n.
22
                 There was a deposition in the case of the
    State of Oklahoma Attorney General. I'm not sure that one
23
    would have been an expert deposition. And as based on the
    previous discussion we've had here, sometimes a
26
    distinction may be blurred.
27
           Q I fully appreciate that.
28
                 There was a deposition, I believe it was in
           Vail, Christians & Associates (619)544-8344
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the Dunn, Wiley case. I remember the attorney's face, but I don't remember exactly which action that was in. And 3 that's all that I can -- that come to mind right now. Where was the Broin case? Where was it tried? Α 6 0 Yeah. 7 In Miami, Florida. Α 8 In each of these -- that's three. 9 Can you think of any -- you can't think of 10 another one? 11 I'm thinking there's a fourth, but I'm not A sure, as I sit here, what that one was. Q All right. And in each of these three, were 13 14 you testifying as an employee of R.J. Reynolds? What I'm trying to distinguish in my mind now is that you're 16 testifying as an employee of R.J. Reynolds rather than you were hired independently by somebody to come testify as 17 18 their expert. 19 That strikes me as a correct statement, yes. I was not -- I was not a consultant or anything else. I 21 was there in my role as an employee of R.J. Reynolds but also one who had extensive experience and expertise in 22 23 studying environmental tobacco smoke. 24 Q Okay. And let me ask the same kind of 25 questions, then, about your court testimony. 26 Can you tell me the names of the cases where you've testified in court? 27 28 Sure. Α Vail, Christians & Associates (619)544-8344 1 The first one would have been Broin, the case 2 in Miami, Florida. It would have been testimony in the Dunn, Wiley case in Indiana, and also in the Butler case 3 in Mississippi. And, similarly, those would have been times where you were testifying in your capacity as an employee 7 for R.J. Reynolds? A As you characterized it in a previous question, I would say that's true. 9 Q Have you done any work specifically in this 10 11 case in order to prepare for today's deposition as an expert witness on behalf of R.J. Reynolds Tobacco Company? 13 Α What have you done to prepare? Yes. 14 Q I reread portions -- some portions of 15 previous publications that I had written or previous 17 documents that I had written that had been supplied to 18 plaintiffs' counsel. 19 I read a couple of additional manuscripts 20 from the peer-reviewed literature. 21 And I read the deposition of Richard 22 Carchman. 23 Q When you say you reread some publications, 24 that would include publications both that you wrote and 25 that others wrote? 26 I tried to distinguish those two in the three 27 categories I gave you. The first part of my response was just things that I and Reynolds had written over the years. 28 Vail, Christians & Associates (619)544-8344 Then the second case was publications that 1 2 other scientists, non-Reynolds scientists would have written. And there were only a couple of those. So I tried to make that distinction in my first answer. I'm trying to clarify. I have you saying you

reread some publications, you reread some documents. You read additional manuscripts. I want to try to be more 8 specific as to what do those different categories mean in your answer. So let me go back. The idea of rereading some publications, that 10 11 was publications that either you or R.J. Reynolds' people 12 had written? 13 That's correct. 14 When you say "reread some documents," what 15 were you referring to there? A I distinguished the documents from 16 17 publications. These would be things that, for example, a Reynolds submission to OSHA or Cal EPA, something like 18 19 that, in which I would have participated. So those are 20 Reynolds documents I would say rather than manuscripts or 21 publications. 22 Q I understand. 23 Α And also read some press releases and other public domain sorts of things, reviewing the RJR website, for example, as another example of that. And that's what 26 I would characterize as both my publications and Reynolds 27 documents. 28 I was -- I was provided something entitled Vail, Christians & Associates (619)544-8344 37 "Bibliography of Documents Relied Upon by Dr. Michael 1 Ogden." Let me call this Exhibit 581. It's something that we received, I guess, on Monday from Mr. Kodsi. (Exhibit 581 was marked for identification.) 4 BY MR. HULBURT: 5 6 Q You'll have to ignore the initials in the 7 upper right-hand corner. That happened in my office. I apologize. I don't have a clean copy without those 8 initials. But let's call this Exhibit 581. 9 Is this a document that you've seen before? 10 MR. KODSI: Do you just have the one copy? 11 MR. HULBURT: I don't have a clean copy. I 12 have other copies that also have notes on them. 13 MR. KODSI: Okay. 14 15 THE WITNESS: Substantively, yes, I've seen 16 it. This looks like a fax copy. It has some header information. And, as you noted, the marginal notations that I don't believe I have seen. But the original, I 18 would say I have seen, yes. 19 BY MR. HULBURT: 20 21 Q Did you prepare the original? 22 Α I participated with Mr. Kodsi's office to 23 prepare this original, yes. Other than you and Mr. Kodsi's office, was 25 anyone else involved in the preparation of Exhibit 581? I 26 appreciate and acknowledge the facsimile notations and the 27 initials in the upper right-hand corner. I'm talking about the substance of the document. 28 38 Vail, Christians & Associates (619)544-8344 1 I'm sorry. Can you rephrase your question? 3 Did anyone other than you and Mr. Kodsi's office participate in preparing the substance of 5 Exhibit 581? 6 I can't exclude the possibility that I may 7 have asked an associate to obtain copies of some of these 8 for me, but they would have done so under my direction. 9 Q When was the original of Exhibit 581 prepared? 10 Α I would say -- I couldn't point to a specific

```
point in time. I would say over the previous month or two.
12
         Q When did its preparation begin?
13
    Approximately a month or two ago?
14
          A No, I don't -- well, I wouldn't characterize
    it in that way. I couldn't even put a date on its
15
16
    beginning. Many of these citations are Reynolds
    documents, publications that I've co-authored, and they
17
18
    would be constant among the various transcripts or
    depositions and testimony that I've given before. So it
19
    looks largely similar to a bibliography relied upon in
20
21
    many other cases, with some things specifically added for
    this case.
23
                 Okay. I was going to ask you that.
           Q
24
                Is this something that has been sort of a
25
    work in progress over time and it was updated or revised
26
    for purposes of this case?
27
                That seems to me to be a fair
           A
28
    characterization, because many of these documents, as I
           Vail, Christians & Associates (619)544-8344
    said, are Reynolds publications. There are other
    publications of note in the field of environmental tobacco
    smoke, chemistry, and exposure. And it's a historical
    account, and most of that -- much of this and other, you
5
    know, has gone into my career in studying ETS. So, yeah,
    it's a living document in that regard.
7
               Okay. I'm taking this page off. It doesn't
    need to be part of the exhibit. I saw that as he was
8
9
    flipping through it.
                 MR. KODSI: Sure.
10
11
                 MR. HULBURT: The exhibit is actually 11
12
    pages of articles and publications.
13
    BY MR. HULBURT:
14
          Q Is that right?
               The last page you're showing me is
15
    No. 11. But as you ask the question, I have to count
16
17
    them.
18
                 That's correct.
                Now, I want to try to understand what --
19
    what's your understanding of what this document in the
20
21 context of this case is intended to represent?
          A I think this would be a reflection of
23
    documents that I would rely upon to formulate or
    substantiate any scientific or expert opinions that I
24
25
    would offer in this case.
              When was the document completed?
26
           Q
           A
27
                I don't know that I can answer that
28
    question. I'm not sure.
           Vail, Christians & Associates (619)544-8344
1
                Can you give me your best estimate?
                Let me look for a couple of things that would
           Α
    have been added recently.
                 No, I don't think I really can. Other than
5
    what I characterized before, I think it would have been
6
    completed within the last month or so. But that's
7
    speculation. I really don't know.
8
               Did you see a final version of it before it
    was produced to the plaintiffs in this case? Perhaps in
9
    order to say, yes, this is the complete list of the
10
    documents that I intend to rely on?
11
12
               No. Actually, I wouldn't characterize it
           A
13
    that way. There was a document that I reviewed
    previous -- you know, substantively this document. There
15
    were two papers or publications that were added more
```

recently, and those were added -- and I doubt that I saw 17 the document -- between the time those citations were 18 added and you received it. But I have seen it today in 19 its final form. And the two that were most recently added, 21 can you identify those for me. Sure. 22 At the bottom of page 2, there's a citation, 23 first author, Gilpin, G-i-l-p-i-n. I'm not sure how the 24 25 other one is going to be cited. So it may take me a moment to find it. 26 I don't remember the -- these appear to be in 27 28 alphabetical order by the first author's name. I don't Vail, Christians & Associates (619)544-8344 41 remember the first author's name, and I'm not seeing it right off. So I can try to go through it again here. 3 Can you tell me the title or something close to the title of the article you're looking for? A Well, this author that I just gave you, Gilpin as the first author, that person was also a 7 co-author of this other document. It was largely, as I read it, the same sorts of things. This citation is a manuscript. The other looked to be a report or a status 9 10 report that would have been prepared for the agency that provided the funding or something like that. So it was 11 largely the same subject matter. And I don't -- I don't believe -- in fact, I'm pretty sure that person was not the first author but was a co-author. 14 The Gilpin article you referred to is 15 entitled "Home smoking restrictions: which smokers have 17 them and how they are associated with smoking," published in Nicotine & Tobacco Research; is that right? 18 Well, the title here. I'm not sure I heard 19 A you say the last word. "Home smoking restrictions: which smokers have them and how they are associated with smoking 21 22 behavior," published in Nicotine & Tobacco Research in 23 1999. All right. Is that publication a 24 peer-reviewed journal? 25 26 A That's not a journal that I read routinely, 27 nor have I ever read routinely. I'm not familiar with their editorial policy. The document, as I read it, Vail, Christians & Associates (619)544-8344 42 appeared to be of the same format that most peer-reviewed documents take. But I'm making an assumption that it is. 3 I don't know for a fact. Is that journal, Nicotine & Tobacco Research, something that you've ever read before or ever read an 6 article from it before this Gilpin article? 7 Not to my knowledge. Q When was the Gilpin article added to this bibliography, Exhibit 581? 9 10 A I don't know. 11 Can you give me your best estimate? 12 I would say within the last one to two 13 months, but I'm not sure. Tell me the -- tell me how it came about. 14 15 Is this an article that you discovered or that somebody brought to your attention, or how did you 17 become aware of the Gilpin article and how was it decided 18 that that should be put on this list? 19 A As Mr. Kodsi and I discussed issues relevant 20 to this case, one of the issues that came up was potential

differences among the residents of the state of California versus other states in the union, possibly where I had made measurements and observations and studied ETS. 23 And the issue that he and I were addressing was what would be some potential differences that would be 26 unique to California. This document is one that describes surveys 27 28 done in the state of California that appeared to be Vail, Christians & Associates (619)544-8344 43 responsive to that. And that's why it's here and what its 1 content is. Do you know E.A. Gilpin? Q 4 Α No, I don't. Have you ever had any contact with E.A. 5 Gilpin other than this article and the other one where he 7 or she might be listed as a co-author? 8 A No. I was not familiar with the name prior 9 to this. 10 Can you tell me on behalf of what agency was 11 this work done that resulted in this publication? A I have an impression, but I couldn't give you 12 13 an exact agency name. Q Tell me your impression. I'm asking because 14 15 in the, you know, day and a half or so that I had this document, I couldn't find that article. So I'm interested 16 17 in any kind of identifying stuff you can give me about it. I believe the -- in the sister publication or 18 the document that I referred to was what I would have 19 broadly characterized as a status report or a result of, 20 you know, progress of the funding. And the funding, as I 22 remember it, was state of California tobacco controlled type of funding. 23 So it appeared to be a state agency or at 24 least funding that came from a state agency. I presume these authors are associated with the university, but it 26 27 appeared to be state funding from California. 28 Q And do you happen to have that article with Vail, Christians & Associates (619)544-8344 44 you here? 1 2 Α No, I don't. What about that article was useful or of 4 significance to you in any of the opinions that you have formulated in this case? 5 A Some of the information in that article that 6 7 I found interesting was the research -- survey type of 8 research that they had conducted, which was survey of home restrictions among populations, random digit dialing type 9 10 of screening survey where they asked respondents to characterize their restrictions, if any, on smoking in 11 12 their home. 13 I'm broadly aware of smoking restrictions that exist in the state of California in public places. 14 This was interesting because their research suggested that 15 16 there was what appeared to me to be a higher than typical 17 for the U.S., anyway, level -- or degree of restrictions 18 on smoking in homes. So I took that information as an indication 19 20 that not only is smoking widely restricted in public places in California, but also there appeared to be an 21 22 above average degree of home smoking restrictions in the 23 state as well. 24 Q Can you be more specific and tell me what the data or the conclusions of this Gilpin article were that 25

you're referring to? Are there numbers that you have in 26 mind or a description of restrictions or something that 27 28 caused you to draw this conclusion that there are higher Vail, Christians & Associates (619)544-8344 45 than normal home smoking restrictions in California? Other than paraphrasing the conclusions as I just did previously, I don't recall any specific numbers from the article. Can you tell me anything -- share with me any 6 of the details of the article that have impressed you that, from there, you learned that California is different 7 from the rest of the nation in this particular way, by 9 some factor or by some percentage, or give me -- I'm seeking any sort of more specificity about this article, 10 11 again, because of something that I couldn't find in the 12 day and a half that I had your list. Well, part of the article was an attempt to 13 A 14 associate smoking restrictions in the home with success 15 rate with smokers quitting smoking. I found that 16 interesting. 17 The article suggested to me -- and, again, I can't quantify that for you -- that the awareness 18 19 campaigns that were going on in the state of California, 20 the public postings and the various advertisements seemed to be having the desired effect, that there was a great 21 22 degree of awareness within the state about environmental tobacco smoke. I can't quantify that in terms of in any greater detail than that at this setting. It's been, you 24 25 know, some time since I've read that article. 26 0 How much time? 27 Α Probably two weeks. 28 Was it -- I want to understand part of what Vail, Christians & Associates (619)544-8344 46 you just said in your previous answer. Was it your understanding that the focus of the effort that this Gilpin article was talking about was that an increase in restrictions, smoking restrictions in the home, were reduced smoking? That's what they were 5 trying to measure or trying to look at? 6 7 A That seemed to be one aspect of it. They 8 attempted to do some statistical correlations of the 9 degree of smoking restriction in the home versus the -what I would characterize as what the authors 10 11 characterized as a successful quit rate among smokers who 12 desired to quit. 13 And there seemed to be a correlation there 14 that suggested to these authors that smoking restrictions 15 in the home was a useful tool in helping smokers that desired to quit to accomplish their goal. 16 17 Q Okay. But the substantive information that 18 you were interested in in that article as it relates to this case was some sort of quantification of the number of 19 California households that have smoking restrictions. 20 21 Is that a correct statement? 22 That information is available in the paper. 23 They also broke it down by variety of minority or ethnic 24 groups. Okay. And that's the kind of specific 25 26 information that I'm trying to press you for. 27 Okay. 28 So I want to do it one last time. Vail, Christians & Associates (619)544-8344 47 1 Can you share with me any of the details on

this substantive information regarding the prevalence of smoking restrictions or the demographics of smoking restrictions as revealed in this Gilpin article? A No, I really can't. I remember they looked at it in certain ways. I remember their data suggested 7 some differences in certain areas, but I can't quantify those as I sit here today, no. 9 This is maybe asking one question more than this subject deserves, but -- I appreciate you can't tell 10 me exactly, but can you share with me your impressions or 11 your -- the general message of this Gilpin article? Maybe 12 you're not going to give me the exact percentage, but do you have any of that sort of detailed information 14 available to you in your mind? 15 Not to any greater detail than I've already 16 17 given you. Okay. Now, this Exhibit 581 which lists 18 0 19 documents that you have relied upon or intend to rely upon in this case, would it be fair to say that the documents 21 that you went back and reviewed in order to prepare for 22 your deposition, that they're all listed in Exhibit 581? 23 The Carchman deposition in this case that I 24 read is not listed here. 25 Okay. I understand that. Let me be more Q 26 specific in my question. 27 You described that you reread some publications, either that you wrote or that R.J. Reynolds Vail, Christians & Associates (619)544-8344 48 1 wrote. Are all of those publications listed in 3 Exhibit 581? And just to jump ahead, I'm interested in how many were there, and then I'm interested in having you tell me which ones they are. 5 Okay. In my previous answer to one of your 7 questions, I indicated that I had reviewed some Reynolds press releases and advertisements and website type of 9 information. I don't see any of that listed here. I know. Right now, I'm just on the part of 10 your answer of what you did to prepare as an expert, in 11 12 part, was you reread publications either that you published or that R.J. Reynolds published? 14 Uh-huh. Α 15 So let me ask the first question. 16 How many of those articles were there that 17 fall into that category? 18 A I would say not more than two or three. 19 Okay. What are they? Please identify those 20 articles or those publications. 21 Okay. Sure. 22 On page 3, there is a citation to Heavner et al., "Determination of VOCs and RSP in New Jersey and 23 Pennsylvania Homes and Workplaces, " 1996. I had a brief 24 review of some of the data in that. I didn't reread the 25 26 text reports. It was just to look at some of the data 27 tables. 28 Same thing with -- where is it? Page 4, Vail, Christians & Associates (619)544-8344 49 Jenkins et al., "Exposure to Environmental Tobacco Smoke in Sixteen Cities in the United States As Determined by 3 Personal Breathing Zone Air Sampling," published in 1996. And I should interject here that there are a number of these, as I go through here, that I have referred to over the course of the last month or two. And

I couldn't honestly tell you whether it was in regards to this case or not. Many of these documents I refer to on 9 an ongoing basis, just to perform my job in studying ETS. 10 So I've had occasion to pull out others of these, but I couldn't say that it's specifically in regard 11 12 to this case. Yeah. The question right now, as you know, 13 0 14 is in preparing yourself to testify as an expert witness in this case, what articles did you go back and reread? 15 Right. And I'm attempting to answer that. 16 Α 17 I've given you two. 18 Q Thank you. 19 Those are that I specifically looked at with Α 20 regards to this case. 21 Right. 22 Are there any others? 23 I'm looking through the list to try to Α 24 refresh my memory. 25 0 Okay. 26 I looked at some of the data in an article on 27 page 6, Ogden and Martin, "Use of Cigarette Equivalents to Assess Environmental Tobacco Smoke Exposure." 28 Vail, Christians & Associates (619)544-8344 1 I reviewed some of the data, the next 2. citation, Ogden et al., "Multiple Measures of Personal ETS Exposure in a Population-Based Survey of Nonsmoking Women in Columbus, Ohio." I've looked at the next one as well, Ogden, 5 6 "Occupational exposure to environmental tobacco smoke," in 7 JAMA, 1996. 8 There's a global reference here to also 9 anything that's in my attached C.V. So we may have to 10 look at that one again in a minute to see if there's something else that's different or in addition to this 11 12 list. 13 Here's the other paper I was -- the other report I was looking for that was the companion to the Gilpin paper. It's on page 8. Pierce et al. The title 15 is "Tobacco Control in California: Who's Winning the 16 17 War? An Evaluation of the Tobacco Control Program, 1989 to 1996." It was published in -- the report date is 19 1998. That's the one I couldn't find earlier. Okay. I appreciate that. 20 21 Is that an article that also fits into this 22 category of something you went back and read in order to 23 prepare as an expert in this case? 24 A Yes. 25 Okay. And the Gilpin article too, I take it? Right. This is Pierce et al. But I'm sure 26 27 Gilpin is a co-author of that report as well. 28 Q You didn't mention it. But just to be fair Vail, Christians & Associates (619)544-8344 51 to you, would you include the Gilpin article from page 2 1 as one of these articles that you went back to review to prepare as an expert in this case? I thought I did mention that. Α 5 Q All right. I thought I did. But if I didn't, yes, that 6 7 is an article that I went back to review in that capacity. 8 I've reviewed the data of Pirkle et al., 9 "Exposure to the U.S. Population to Environmental Tobacco 10 Smoke, " recently. But, again, that's one of those I'm not 11 sure whether it was in the context of this case or not.

It's certainly relevant, as these are. 12 I've reviewed -- well, one I don't see here 13 is R.J. Reynolds' response to California EPA. The parts 15 of it that I did review are largely the same as what is referenced here. "R.J. Reynolds Tobacco Company, Comments 17 to the Occupational Safety and Health Administration." And there are a couple of citations to OSHA 18 19 comments, but I reviewed some Cal EPA Reynolds comments as 20 well. But I don't see that citation here specifically. Are the R.J. Reynolds comments to the Cal EPA 21 22 report, documents that you are also relying on in this case as an expert? 24 Α Sure. 25 Is there anything else in Exhibit 581 that is 26 a document you that went back to reread in order to 27 prepare yourself as an expert for today's deposition? A Nothing that comes to mind, as I sit here, 28 Vail, Christians & Associates (619)544-8344 52 that I can say with certainty I reviewed specifically for the purposes of this case. But, as I said earlier, many of these I -- or I have occasion to review on an ongoing basis for a 5 variety of job-related functions as I study ETS. 6 MR. MILES: Counsel, we've been going about two hours at this point. Whenever it's convenient to 7 break, could we do that? MR. HULBURT: Sure. I think I was just so 9 happy to be going, I just wanted to keep going. We can 10 take a break right now. That's fine. 11 12 (Recess.) 13 MR. HULBURT: Okay. Back on the record. BY MR. HULBURT: 14 Q Let's stay on this Exhibit 581, this list of 15 "Documents Relied Upon By Dr. Michael Ogden." 16 17 I also want to say I apologize -- as I said 18 off the record, I apologize during any of my earlier comments where I kept referring to you as Mr. Ogden. That 19 was not intentional. I raise that because I've frequently 20 21 had lawyers opposite me who do that intentionally to my 2.2 Ph.D. witnesses. And they think that it's some sort of trick or something to catch you or whatever. I was not 24 doing that intentionally. This list, Exhibit 581, is this everything 25 26 that exists in your file? Is this the representation of 27 your file as an expert witness in this case? 28 MR. KODSI: Objection; assuming facts not in Vail, Christians & Associates (619)544-8344 53 evidence. THE WITNESS: I don't have a file in this case, per se. I mean, I have files. This would not be an exhaustive list of everything in my files, no. These 5 would be documents, as I've said earlier, that are substantive. And, you know, understanding the chemistry 7 of ETS and exposures to ETS in the United States. 8 BY MR. HULBURT: 9 Well, for instance, I'm interested in knowing 10 whether you have any correspondence between you and any 11 lawyers related to your role as an expert witness in this case. Let me just go on. I'll ask a cumulative question. 12 13 Whether you have any notes, whether you have 14 any e-mail communication related to your role as an expert 15 witness, whether you actually have a file that is your 16 file as an expert in the AESI case, or is Exhibit 581

17 really the representation of everything that is your file 18 in this case? 19 MR. KODSI: Objection; cumulative. 20 But to the extent you can answer, you can 21 certainly try. 22 THE WITNESS: If you want me to answer that, 23 you're going to have to take it piece by piece because I 24 don't want to misrepresent anything. BY MR. HULBURT: 25 26 Q Fair enough. 27 So if you'll go one at a time, we'll see what Α 28 we can do. Vail, Christians & Associates (619)544-8344 54 1 Sure. 2 Do you have any correspondence between you and any of the lawyers related to your role as an expert witness in this lawsuit? A I have documents that have been provided to 5 6 me. I wouldn't characterize them as correspondence. For 7 example, I have a copy of my disclosure statement. Many of these documents I provided to counsel. There is no file of correspondence that I've kept. I mean, there have 9 been communications, of course, e-mails back and forth 10 11 trying to schedule dates, ETS. But I've not retained 12 those e-mails, to my knowledge. That would have been 13 related to simply tactical issues of scheduling dates and 14 what dates I'm on vacation and things like that. Have you retained any e-mails between you 15 16 and any of the lawyers in the case related to your role as 17 an expert witness in this case? 18 Any e-mails that I would have received would A 19 have been related to what I call tactical issues. 20 Scheduling a meeting, hey, can we get together at a 21 certain time, can you give me some dates that you're available for deposition. So, no, I would not have 22 23 retained those. And those are the only ones I recall that were generated at any point in time. Just scheduling meetings and finding available dates and that sort of 25 26 thing. 27 Have you retained any letters that you 28 received from any of the attorneys in the case related to Vail, Christians & Associates (619)544-8344 55 your role as an expert witness? 1 2 MR. KODSI: Objection; lack of foundation. 3 THE WITNESS: I'm not aware of any letters 4 that I've received in this case. 5 BY MR. HULBURT: Other than receiving the -- your designation 7 as an expert in the case, have you received any documents of any kind from the attorneys? 9 Could I ask you to read that back or restate 10 it. I missed the first part of that. 11 Yeah. 12 You said that -- you said earlier that I received my expert designation; is that right? Did you receive your expert designation from the attorneys? 14 A Yes. What I was referring to -- actually, 15 16 that wasn't one I was referring to a minute ago. I was referring to the -- I suppose it was a notice from 17 18 plaintiffs on this side of what, you know, the issues that 19 were being asked were and, you know, the bullet, one, two, 20 three, here's what we wanted somebody to be responsive to. 21 0 The PMK notice?

22 That may have been what that was. I'm not 23 sure of the exact lingo for the designation. 24 Q All right. What else besides that did you 25 receive from the attorneys in this case? I received the deposition of Dr. Carchman, a 26 A copy of that. 27 28 Actually, there is a cover letter or memo Vail, Christians & Associates (619)544-8344 56 from whoever shipped that, when that arrived. I probably 1 still have that. It was from a secretary in a law firm 2. somewhere in California. I don't know. Just here's a copy of the Carchman deposition. 5 Okay. Does that memo or cover page have any 6 substantive information at all? 7 Α No. 8 All right. So other than the deposition 9 notice with the categories, the Carchman depo, did you 10 receive anything else from the attorneys in this case? 11 Not that I can recall, no. 12 Just so that we're clear, did you receive the 13 expert designation where you were identified as an expert witness in this case? We talked about this already. But 14 I'm not sure whether you were clear on it. 15 16 A I'm not clear in terms of the various designations as you're using them to refer to. If you've 17 18 got a document and I can see it, maybe I can say whether I've seen it before or not. 19 Q Let me hand you what's entitled "Expert 20 Witness Declaration on Behalf of Phillip Morris 21 22 Incorporated, R.J. Reynolds Tobacco Company, Brown & 23 Williamson Tobacco Corporation, and Lorillard Tobacco 24 Company." 25 Page 11 is flagged because that's where it 26 refers to you. 27 And so the question is, is this a document 28 that you received from the attorneys in this case? Vail, Christians & Associates (619)544-8344 57 This is not a document that I have received 1 in that I don't have a copy of it, but I have reviewed 2 3 this particular page that relates to me. But I do not have a copy of the document in its entirety. 5 When did you review the page that refers to 6 you? 7 I last saw it yesterday. I don't recall when 8 I first saw it. 9 Q Did you play any role in preparing the 10 description of your anticipated testimony, which is found 11 on page 11 at line 17? 12 Α Yes. In what way? Tell me how that came about. 13 14 These are statements that attorneys and I would come to agreement and so on as to what I would be 15 16 prepared to testify about, what are my areas of 17 expertise. So these types of statements are -- I mean, this language would have been hashed out over many months 19 preceding today. I can't give you a better characterization of how that transpired. 20 21 You know, a document or a paragraph could 22 have been written. I would review that, make changes, 23 supply it back, and it would be an iterative process back 24 and forth. I have no specific recollection of -- beyond 25 that, of how that paragraph came about. 26 Other than the notice of the deposition and

27 the Carchman deposition and at some time reviewing this expert designation declaration, are there any other 28 Vail, Christians & Associates (619)544-8344 58 1 documents that you've received from the attorneys related to your role as an expert witness in this case? Α Not that I can recall, no. Let me kind of expand the question a little 5 bit. 6 Are there any documents that you received 7 from some source other than the attorneys related to your role as an expert witness? I'm not trying to go back and 8 refer to the articles that we've already talked about or that are listed in the exhibits. But maybe you've 10 acquired some documents from some other place that didn't 11 come directly from the attorneys. 13 Is there anything else that you received like 14 that? 15 Nothing that I can think of that would fit Α that category at all, no. 17 Do you have any notes that would be your notes related to your role as an expert witness in this 18 case? Handwritten, typewritten, computerized, whatever 19 way you might keep notes. Dictated. Anything. 20 21 A No, not that I can think of. 22 Did you take notes that you have no longer 23 retained? I would have taken some notes along the lines of the e-mail correspondence I characterized earlier in 25 terms of setting dates and, you know, a note to myself. 26 27 need to read this document or something like that. Like a daily "to do" list, sort of an entry of -- in fact, I had 28 Vail, Christians & Associates (619)544-8344 one such just in reference to Exhibit 580, as you can see, 1 last dated 6/30. I had on my "to do" list to generate an updated RJR ETS list. Which I would have done. And then deleted the note to do that. But no substantive issues I can think of. Is this "to do" list something that you do on Q 7 your computer? 8 No. Much like your document designation, 9 it's Post-it Note stuff on my computer screen or something like that. 10 Were you instructed by any of the attorneys 11 12 not to keep notes related to your role as an expert 13 witness? 14 A No. 15 Were you instructed to not retain any of your Q 16 notes? 17 Α 18 Were you instructed to not retain any of the Q 19 e-mails? 20 No. Well, maybe I should say, along those lines, I mean, within R.J. Reynolds, we have formal 21 22 document retention policies that every employee has a 23 responsibility for maintaining as regards a variety of 24 litigation. And I certainly comply with that document retention policy that we have imposed on our own company. 25 26 But I don't regard e-mails related to 27 scheduling an 11 o'clock appointment as relevant. So I 28 don't retain those. Vail, Christians & Associates (619)544-8344 60 1 How do the document retention policies of R.J. Reynolds apply to any of the documents that we're

describing here as related to your work as an expert in 4 this case? 5 MR. KODSI: Objection; lack of foundation. 6 THE WITNESS: The R.J. Reynolds document retention policy is one that requires all documents to be 7 8 retained -- all final versions of documents to be retained that have bearing on any of the litigation that the 9 10 companies engaged in. I certainly respect that order and 11 comply with that. 12 I wouldn't say there's anything -- nothing 13 that -- let me rephrase that. There's nothing that I can 14 recall that is specifically -- has specifically been implemented in the R.J. Reynolds retention policy that 15 16 regards this case specifically. 17 There were some previous case-specific things that, you know, have gone into place and have expired as 18 litigation has moved forward. 19 20 BY MR. HULBURT: 21 How much time would you say you've spent preparing for your testimony as an expert witness in this 23 case? 24 15 years. 25 I anticipated that answer as soon as I asked Q 26 the question. And so let me try to be more specific. In your effort to go back to prepare for the 27 28 deposition, to do these things that we've been describing Vail, Christians & Associates (619)544-8344 61 or talking about here this morning to get ready for your 1 testimony, how much time have you spent specifically on this case? 4 That's a difficult question to answer because Α it's difficult for me to delineate, as I indicated 5 earlier, which document I might have read as a responsibility in my ongoing job function versus something 7 specific to this particular case. 9 Give me your best estimate. Q 10 I would say five to ten days. Α 11 0 A day being an eight-hour day? 12 Δ Sure. 13 Q How much of that time was spent talking with the lawyers? 15 MR. KODSI: Objection; lack of foundation. THE WITNESS: This is just a wild 16 speculation. I have no idea. I would say 20 to 30 17 18 percent of that. 19 BY MR. HULBURT: 20 Q Is that your best estimate? 21 That's my best quess, yes. Have you spent any time at any time in your 23 career at R.J. Reynolds where you have participated in 24 training sessions to testify? 25 Α Yes. 26 How many times have you done that? Q 27 Two or three seems to be about right. 28 When was the first time? Vail, Christians & Associates (619)544-8344 I'm not entirely sure. It would have been in 1 the early nineties. Somewhere between 1991 and 1994, I would say. And that's about as good as I can get. 4 So that first time, let's talk about that. 5 Was that something done in-house at R.J. Reynolds, or through some other company, or describe for me what was done?

There was a consultant to R.J. Reynolds that 9 was hired to lead that sort of an exercise. So I'm not 10 sure I would characterize it as entirely an internal RJR 11 type thing. But it was something sponsored by the 12 company. 13 Were there other employees participating with Q 14 you at the same time, or was it training particularly 15 focused on you? 16 No. There were others as well. Α 17 How many were in the training session with 18 you? I would say a half a dozen as a guess. 19 20 Can you tell me the name of the company or Q 21 the name of the consultant that conducted the training? 22 The name of the company, I cannot. The name 23 of the individual that I remember is Virgil Scudder. Scudder with d's? S-c-u-d-d-e-r? 24 Q 25 I believe that's right. Α 26 And how long was the training? Over what Q 27 period of time? I really have a vague recollection of this. 28 Α Vail, Christians & Associates (619)544-8344 63 So I'm giving you my best guess. I recall spending a 1 2. couple of hours with him in that type of session. It may have been as much as a half a day. I just don't recall. 3 Q What was done? Can you describe for me what 5 the training was? 6 Sure. Α 7 The one -- the instance that I remember most 8 clearly was in preparation for the R.J. Reynolds testimony 9 at the OSHA public hearings, and this would be a forum that Mr. Scudder would have been, as my representation of 10 that, that he would have been hired to sort of lead that 11 discussion where the panel of Reynolds scientists would stand and make the presentations that they intended to 13 14 give at OSHA. 15 It was an opportunity for not only -- well, primarily, the exercise, as I recall it, was to allow the 16 other panel members to hear everyone else's presentation, 17 18 check to make sure it was within the allotted time frames, to allow me to hear my colleagues speak, to make 20 suggestions as to continuity and that sort of scientific critique of our peers. 21 There would have been people like Mr. Scudder 22 23 involved to look at it from more of a layman's 24 perspective, to hear the science, but to say that sounded 25 wonderful but I didn't understand what you said. Is there a way that you can say that that's more clear? And that's a valuable role that this type of person would have in 27 28 this regard. Vail, Christians & Associates (619)544-8344 1 There would also have been opportunities for him to question, to allow us to foresee the possibility of a media interview. You know, if a reporter asks you this question, what are you going to say? That sort of thing. 5 So it would be more of a -- at that end of the discussion or that end of the program would be more of 6 7 how would you respond to a media questioning about your 8 presentation? 9 And it was very helpful, because as this 10 answer dictates, sometimes scientists can be a bit 11 long-winded, and we don't necessarily think in the same 12 progression that reporters like to hear things. So it's

very helpful to get different perspectives on how you're 13 being -- how your information is being received by people 15 who may not be scientists. 16 Q Was this session videotaped? 17 I remember portions of the exercise being 18 videotaped, but I would not say that the entire session 19 was videotaped. By that, I mean that you made a presentation 20 21 that was videotaped and then watch it, critique it, see what you did well, see what you did not do well. 22 23 Was there any part of that in the exercise? 24 I remember being videotaped, and I remember a 25 critique offered as a result of that, yes. 26 From that session, did you receive any 27 written materials? 28 A Substantive material? I'm not sure of your Vail, Christians & Associates (619)544-8344 65 1 question. Substantive materials about how to be a good witness, consistent with what the whole program was. A Well, I wouldn't say the purpose of the program was to -- was how to be a good witness, the 5 phraseology that you used. 6 7 It was more along the lines of how to be an effective presenter of scientific information to 8 9 nonscientists, how to answer questions that might be posed to you by nonscientists, such as media persons, reporters, 10 11 and whatnot. I remember receiving a packet of 12 13 information -- well, actually, it's a little box that 14 Mr. Scudder had prepared that was actually a presenter's box sort of thing that had an instruction sheet inside 15 that made suggestions on how to prepare the notes that you 16 would speak from in terms of font size and things, you 17 know, bizarre little things like that to make sure that 18 19 you could read your notes. In general, I don't speak from notes, 20 21 though. So I didn't find that particularly helpful. 22 That's the only information I recall that was 23 provided. It was sort of a complimentary kit for how to prepare your presentation and your notes and put it in 25 this box and read from it. But, generally, I don't read for presentations. So I didn't think anything of that. 26 27 Q Was this an effort to prepare testimony for 28 OSHA regarding the subject of ETS? Vail, Christians & Associates (619)544-8344 66 The Reynolds response to OSHA was focused on 1 ETS. The larger context was OSHA's proposed indoor air quality rule that included, as a component of that, various restrictions and commentary specific to ETS. 5 Who were the other scientists that participated in this first session with Virgil Scudder 6 7 somewhere between '91 and '94? 8 I'm not sure -- well, this session that I'm describing is the one that I most vividly remember. I'm not sure whether that would have been the first session. 10 This session with regard to OSHA 11 12 presentations or preparations would have been conducted more like in '93 as opposed to -- '93 or '94. The other 13 14 scientists that would have been -- you asked me for names 15 of people that were there? 16 Q Yes. Please. 17 Okay. Dr. Stephen Sears, Mr. Tom Steichen, Α

Dr. Paul Nelson. 18 Q Millson, or Nelson? 19 20 Α Nelson. 21 Dr. Christopher Coggins. I'm not sure if I 22 gave Mr. Bohanon. Dr. Charles Green. That's all that 23 comes to mind right off. Q All right. Can you give me the dates or 24 approximate date of any of the other training sessions 25 26 you've had for testifying? A My recollection -- and I apologize for it 27 28 being as vague as it is. But there may have been and Vail, Christians & Associates (619)544-8344 probably was a similar session that would have been in the 1 early nineties, '91, maybe ninety -- well, probably 1991 that would have been similar in scope but more directly related to presentations we were preparing to make to the 5 U.S. EPA Science Advisory Board in the context of their 6 public hearings. 7 Was that also with Virgil Scudder? Q 8 A Yes, I believe so. 9 And what was the format of that training? Q Very similar to what I just described. 10 A How long did it last? 11 Α 12 It was much shorter in scope because we were 13 limited by the EPA in the amount of time that we could 14 present. So the actual presentations, I believe we 15 16 were given a ten-minute time or maybe even five minutes was all we had. And they restricted us to one scientist 17 to speak. So we had -- you know, this was much more a 19 time-constrained event because we got to make sure -we've got a lot of information. We provided all that in 20 21 written commentary to the EPA, but they restricted our ability to present that orally. So we had to really focus that, make sure we got our -- most -- as we viewed it, our 23 24 most important points presented in a very narrow time 25 frame. So it would have been shorter by comparison 26 27 because there wasn't the opportunity for half a dozen 28 scientists to speak and that sort of thing. Vail, Christians & Associates (619)544-8344 68 1 Were you the one that spoke? 2 No, I was not. Α Okay. And can you give me -- describe the 3 4 other -- I -- you said there were two to three training 5 sessions. 6 Is there another one? 7 My recollection is that any or all of those types of sessions would have been in the context of either 9 a presentation to EPA Science Advisory Board or in 10 preparation for our testimony before the OSHA panel. 11 Those are the only ones that I recall. 12 Have you had any other training sessions that you had understood were geared toward testifying in a 13 14 deposition or trial, something related to a lawsuit? 15 Nothing that I would characterize as a 16 training session, no. Well, what sorts of -- I don't want to get 17 18 stuck on the phrase. 19 But what sorts of instructional sessions or 20 other educational or informative or training sessions have 21 you had through R.J. Reynolds with respect to the subject 22 of testifying in a lawsuit?

23 MR. KODSI: I'm going to object at that point 24 and just instruct the witness not to reveal any 25 information that might violate the attorney-client 26 privilege. 27 But to the extent you can answer that 28 question without revealing any attorney-client privileged Vail, Christians & Associates (619)544-8344 69 information, you can answer. THE WITNESS: I'm not sure of the difference. 3 Prior to my first deposition and prior to my first court appearance, there were -- I mean, there was no training session, as you've characterized it. There would have been discussions between myself and Reynolds' 6 attorneys as to what to expect, what's the format, what's 7 8 the -- you know, what role do I play, what role do the 9 other attorneys play. Basically, to educate me as to the process because I'm not a lawyer. I'm not schooled in the 10 legal system. I'm a scientist, and this is a foreign 11 environment to me. So I expected and greatfully received 13 some information as to what to expect. Beyond that, I mean, I certainly would not 14 15 characterize that as a training session. You know, all these documents that we've talked about earlier, 16 17 preparing, and the effort going in to preparing those, you 18 know, what's responsive to a particular request and what's 19 not and what's overly verbose and what's not, those kinds 20 of issues would have come up from time to time throughout 21 this process. BY MR. HULBURT: 22 I appreciate that answer. 23 24 Have you had any other sessions that I'm 25 trying to call training sessions, which I'm trying to use 26 as a broad term, that might include some educational input that you're receiving with respect to the subject of how 27 28 to testify? Vail, Christians & Associates (619)544-8344 70 I'm trying to be sensitive to Mr. Kodsi's concern also. I'm not really asking you at all about talking with R.J. Reynolds' lawyers about any particular -- the substance of any particular deposition. I'm not interested in that, and that is attorney-client. I'm really just interested in the subject of 6 7 how to testify. 8 As I hear your question, what I would have to say, it may be elaboration or even corrective from what I 9 10 just said. 11 I would not say I have had any training 12 session, per se, on how to testify. 13 There would have been discussions on what to expect in the legal forum that would have gone on as part 14 15 of preparing my own expert responses to various issues to 16 be a witness. But I would not characterize that as a 17 training session, and I would say I've never had a 18 training session on how to be a witness in the legal forum. Simply, to be an effective presenter in a more 20 technical or public relations type forum, that would be 21 the OSHA or EPA type hearings. 22 All right. I want to go back to the subject 23 we were talking about. 24 What did you do to prepare yourself as an 25 expert witness for this deposition? I think we covered 26 the publication review well. 27 You listed several other sorts of documents

that you reviewed, and I want to make sure I capture all Vail, Christians & Associates (619)544-8344 71 of that. 1 2. I know already from you that you reviewed or re-reviewed the R.J. Reynolds responses to the OSHA effort and to the Cal EPA effort; is that right? That's right. Okay. And you've reviewed some press Q 7 releases you said? 8 A Uh-huh. 9 What press releases? 10 There is a stack of those that my understanding of them is that these would have been 11 presented to plaintiffs' counsel in this case. These are 12 things, public statements that R.J. Reynolds would have 13 14 made that would be broadly applicable to ETS. There would have been some statements made by Reynolds' scientists and 15 16 P.R. spokespersons either in a congressional hearing or a 17 press release. There were several of those that I 18 specifically recall, relating to product development 19 efforts. You know, introduction of new products into the market, that sort of thing. 20 21 Ads that would have been published that might 22 have had information about ETS in them or other press releases that would have had ETS information. And there 23 24 was a fair stack of those, as I recall. How thick is this stack of things that were put in the category of press releases, which I want to use 26 to describe all of the things you've just described. 27 28 I wouldn't necessarily call them press Vail, Christians & Associates (619)544-8344 72 releases. This would be what I would characterize as 1 company statements that would not be otherwise classified as research manuscripts or publications or in the scientific literature. 5 These would be statements and positions and possibly the summary of scientific data in more of a layperson type media, newspaper, magazine, or put out on 7 an associated press type of release. 8 9 How thick was this stack? 10 I remember a stack -- see, this is -- there was some debate that I remember being involved in as to 11 what was exactly responsive in this case. How far back in 12 13 time did he -- were we being requested to provide 14 information. And I have different dates floating around 15 in my mind. 16 The largest stack I remember went back to 17 1994, and I would -- recollection is it was maybe as large as the stack you have in front of you. Maybe not quite 18 19 that large. So three, four, five inches stack of material. 20 And do you have those records here? 21 I do not. My understanding is that those 22 were documents that had been delivered to plaintiffs' 23 counsel in this case. 24 Q When? 25 I have no idea. Α 26 MR. MILES: I can answer that, Counsel. They 27 were given to your office yesterday morning, the materials 28 he looked at, and are the materials you have and probably Vail, Christians & Associates (619)544-8344 73 1 what's sitting on the table in front of you. 2 MR. HULBURT: So whatever documents are in the three- or four-inch or five-inch stack of press

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releases/company statements, other than scientific
 5
    literature, were produced to us yesterday morning?
                 MR. MILES: The materials that he looked
 6
 7
    at -- and I don't know that the size descriptions are
    accurate. But the overall stack of materials that he
 9
    looked at was the material that was provided to your
    office yesterday morning.
10
11
                  So there isn't anything that he's referring
12
    to that you haven't been provided.
                 MR. HULBURT: Logistically, was that provided
13
14
    to us by handing it to Mickey McGuire yesterday at the
15
    deposition, or was it delivered to the office?
16
                 MR. KODSI: I'll answer that one. I brought
17
    it in to the deposition yesterday. I know Mickey had a
    courier come and get it at 9:15 or 9:30 in the morning.
18
19
    It was right at the beginning of the day. So I assumed it
    arrived at your office how ever long it takes to get from
20
21
    here to your office after, let's say, 9:30 in the morning.
22
                 MR. MILES: But it was given to Mr. McGuire
23
    yesterday morning?
24
                  MR. KODSI: Yes.
                  MR. MILES: He did give it to you, didn't he?
25
26
                 MR. HULBURT: I got some documents, but I
27
    don't think I got press releases. I don't think I got ads
    with information regarding ETS. I got stuff like
28
            Vail, Christians & Associates (619)544-8344
                                                                74
    responses to the Cal EPA, things like that that got
    produced.
    MR. MILES: Okay. There was, included in the materials, some press releases. I'm quite confident they
 3
 5
    were there because I personally copied them.
 6
                 MR. HULBURT: Okay.
 7
                  MR. MILES: So I know they went over to you.
                 MR. HULBURT: Okay.
9
    BY MR. HULBURT:
10
                You also earlier put into this category of
11
    documents that you read other than scientific documents,
    the website, the R.J. Reynolds website.
12
13
                  Did you review the R.J. Reynolds website as
14
    part of your preparation for your testimony as an expert
15
    witness?
16
           Α
                 Yes.
17
                 When did you do that?
            Q
                 Well, I was involved in the generation of the
18
19
    content of that website. That would have predated this,
20
    if memory serves correctly. But the final version as it
    appears on the website currently, I would have reviewed
21
    very recently because, as you probably know, content of
    websites can change. I wanted to make sure that it was --
    you know, I reviewed the current information. I'm not
24
    aware that it changed, you know, over when I reviewed it
25
    previously. But I reviewed it just in the last few days.
26
27
                What was your role in generating the content
28
    of the R.J. Reynolds website?
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                                                                75
1
                 To make sure that any statements made about
    the science of ETS were technically accurate. I recall
    specifically providing some definitions. I recall
    reviewing the proposed wording to make sure it was
 5
    technically accurate.
 6
                 Did -- this might be a hair that we can't
            Q
 7
    split, but did you write any of the content, or was it
     submitted to you for sort of your sale of scientific
```

approval? 10 I never sat down with the intention of trying A 11 to pin a page on the website. There were some 12 definitions, as I indicated, that I did commit to writing and send to various people. So in a matter of speaking, I suppose, yes, I wrote part of it. But to the extent that somebody may have changed my language slightly and sent 15 that back and said is this deal accurate and I would have 17 said, yes, then it would have been really their language 18 or their interpretation of what I had written as a 19 scientist. 20 So I participate, but not with the intent of 21 actually generating the content verbatim of the website. 22 That was a -- that was basically a P.R. type function. 23 Generating the content of information to the public is what our public relations department does. So if the P.R. department wrote the content, 25 0 26 your understanding is that if it had scientific 27 information in it related to ETS, it would go through you 28 to make sure that it was scientifically accurate? Vail, Christians & Associates (619)544-8344 76 Me or other scientists. Absolutely correct. 1 Yes, that's true. 3 All right. So some scientists at R.J. Q Reynolds would approve any scientific statements before it gets on the web --Scientists and engineers, yes. 6 Α 7 That was the thought process? Q 8 Α 9 Q You also identified that you read additional 10 manuscripts in order to prepare as an expert witness. 11 Maybe I already asked you that. But what does that mean? 12 Manuscripts, what is that referring to? 13 I use that language -- as I'm recalling our previous conversation, I use that language to delineate 14 15 responses to various public hearings or the OSHA and EPA responses, for example. Things that were not intended to be published in the scientific literature but that would 17 have been submitted to various agencies as part of their 18 19 generating a public record comment, period. 20 So these would be responses to OSHA and EPA 21 and Cal EPA and those types of things. Other than the OSHA, EPA, and Cal EPA 22 23 responses, are there others that you can identify for me with some specificity and say I reviewed that as well? 25 I'm trying to capture whatever goes into this thought of 26 manuscripts. 27 Well, I would -- sorry. MR. KODSI: Object to the extent this is 28 Vail, Christians & Associates (619)544-8344 77 cumulative. But you may answer. 3 THE WITNESS: I would characterize that one of the two documents that had Gilpin as a co-author is not a scientific publication. That could broadly fit into this manuscript form as well. That was a status report to 6 7 a funding agency is what it appeared to me to be. 8 Other than what I've already responded to in 9 answer to previous questions, I can't think of anything 10 more specific that I've not included. 11 BY MR. HULBURT: 12 All right. And you read Dr. Carchman's Q 13 deposition?

I did, yes. 14 Α 15 Okay. Have you read anything with respect to Q Dr. Nazaroff's testimony, either his deposition testimony 16 17 or his declaration that was filed in this lawsuit? I have not read his deposition. I don't 19 recall whether I may have seen a declaration -- whatever you said, a declaration of intent or of testimony. I 20 21 don't know whether I've seen that. 22 0 There's a declaration that he filed that's 23 over a hundred pages, on legal paper, that was filed some time ago with respect to a motion for a preliminary 24 injunction in this lawsuit. 26 I don't recall seeing anything of that 27 volume, no. 28 Have you seen anything that you understand to Vail, Christians & Associates (619)544-8344 be a summary or a description of any of Dr. Nazaroff's 1 testimony? I'm trying to use testimony as all-inclusive. Either deposition testimony or declaration testimony, written. 5 I'm not sure that this is the intent of your question. But in many of the documents that I've relied 7 upon here, I would presume would also be relied upon by him because they are relevant documents in the field. I don't recall seeing anything that Dr. Nazaroff authored 9 specifically in the context of this litigation. I don't recall anything that fits that description. 12 Okay. And you haven't seen anything that summarizes it or describes it? That was the current 13 question. I know you hadn't seen the actual documents, 15 and so now I'm trying to figure out whether you've seen anything that summarizes or describes what Nazaroff has 16 17 said in this case. No, I don't believe I have. 18 A 19 20 conversations with respect to what Dr. Nazaroff has said 21 in this case? Yes. I had some conversations. 22 Α 23 Tell me about that. 24 MR. KODSI: To the extent that those conversations are with attorneys and fit within the 26 attorney-client privilege, I will instruct Dr. Ogden not 27 to answer. MR. HULBURT: Well, doesn't this directly go 28 Vail, Christians & Associates (619)544-8344 1 to his role as an expert witness? I mean, the attorney-client privilege really doesn't apply in that situation. If you've given him information about which he's going to testify as an expert witness, you can't claim attorney-client privilege for that. MR. KODSI: As an employee of R.J. Reynolds, 7 though, conversations he has with the attorneys about this 8 or any case are privileged. 9 If you want to ask him what knowledge he has 10 unrelated to conversations with attorneys, he can answer 11 those questions globally. But as far as specific conversations he may 12 have had with lawyers, I don't think that -- I think that 13 does fit within the privilege. 14 15 BY MR. HULBURT: 16 Is it your understanding, Dr. Ogden, that you Q 17 will be expected to testify in some way in rebuttal to 18 Dr. Nazaroff's testimony in this case, to respond to him,

```
to rebut his testimony?
     A Well, I wouldn't even limit it to
21 Dr. Nazaroff. But, yes, I would expect my role here to
22 be -- to comment on testimony entered into the record by
23 other experts.
2.4
          Q
                All right. And so what information do you
25
    have now with respect to testimony from Dr. Nazaroff?
26
          A The information I have was from a
   conversation with one of our attorneys.
27
          Q Which one?
28
           Vail, Christians & Associates (619)544-8344
                                                            80
               Mr. Kodsi.
2
               When was that?
           Q
               The most recent was yesterday.
3
           Α
               When was the first time that Mr. Kodsi talked
           Q
5
   to you about Dr. Nazaroff's testimony?
          A Some time ago, but I can't -- it would be
6
7 months ago. I don't recall exactly.
          Q How many conversations have there been
9 between you and Mr. Kodsi regarding Mr. Nazaroff's
10 testimony in this case?
           A I don't recall a specific number. I would
11
12
    say the issue may have come up fewer than a half dozen
13
    times. Three or four times, maybe. Maybe as many as five
14 or six. But it doesn't strike me as being any more than
15
                And so my question again is what do you know,
16
   as you sit here now, regarding the testimony of
17
18 Dr. Nazaroff in this case?
19
                 From conversations with --
20
                 MR. KODSI: I've got to object.
21
                 Why don't we go off the record for a second
22 and take about a two-minute break.
23
                 MR. HULBURT: All right.
24
                 (Recess.)
25
                 MR. KODSI: You want to go back on the
26
   record?
27
                 MR. HULBURT: Yeah.
28
                 MR. KODSI: We're back on the record. We've
           Vail, Christians & Associates (619)544-8344
   entered into a stipulation off the record that I'll try to
2 recite on the record.
                 Chris, you tell me if I said this correctly.
                 I will waive the attorney-client privilege
5
    that I have with Dr. Ogden with respect to conversations
6
    we have had about the testimony of Dr. William Nazaroff in
7
    this case.
8
                 That waiver only relates to conversations we
9 specifically had about Dr. William Nazaroff in this case
10
    and nothing else.
11
                 And as long as counsel agrees with that
12
   stipulation, then I will waive my objection and allow
13
    Dr. Ogden to answer questions related to his knowledge of
    William Nazaroff.
14
15
                 MR. HULBURT: I do agree with that.
16
                 And we then had the thought of if he's
17
    prepared now to have any comment about the testimony of
    any other plaintiffs' witnesses who have already
18
19
    testified, I want to ask him about that now as well.
20
                 MR. KODSI: That question, you can ask.
                 MR. HULBURT: All right.
21
22
                 MR. KODSI: If in going further, you ask what
23 conversations he's had with the attorneys about other
```

24 witnesses, then I'd have to object. 25 But I think when you ask the question, you'll be comfortable at that point, forward. 26 27 MR. HULBURT: All right. BY MR. HULBURT: 28 Vail, Christians & Associates (619)544-8344 82 All right. So the question to you, 1 Dr. Ogden, is what do you know now regarding the testimony of Dr. Nazaroff in this case? A I understand that he is relying on some of my 4 5 exposure assessment work in the area of ETS in formulating 6 his opinions. 7 I understand that he is using some of our 8 publications in that regard. 9 And I understand that he is calculating 10 exposures in terms of cigarette equivalents. 11 Q Do you have any opinions now that you 12 understand to be responses or rebuttal or critique of any 13 of the testimony that Dr. Nazaroff has given in this case? 14 Α I understand or it's been represented to me 15 that in his -- some of his chemicals or constituents of ETS or alleged constituents of ETS that he has 16 formulated -- or that he may formulate opinions on 17 18 exposure, I have opinions as to whether or not those are valid markers of ETS. 19 20 I understand that he has used some statistics from some of our studies that I would consider extreme 21 statistics and not necessarily typical data. 22 I understand that the studies that he is 2.3 relying on that we have conducted have not been conducted in the state of California and that there may be or there appear to be reasons why similarly conducted studies done 26 27 in California might result in lower exposure numbers. That's all I can think of right off the top 28 Vail, Christians & Associates (619)544-8344 83 of my head that might be responsive to your question. 1 Q Is there anything else about Dr. Nazaroff's testimony in this case that you've been told, any 3 substantive, any specifics, any parts of his testimony, 4 5 that you're aware of? Not that I recall. A 7 Other than Dr. Nazaroff, are you aware of the testimony of any other of the plaintiffs' witnesses who 8 9 have testified in this case so far? 10 A I'm aware of a name or two that have been 11 mentioned as potential witnesses or maybe have been 12 deposed or will be deposed, but I have no -- obviously, 13 for ones that have not been deposed, I have no knowledge 14 of what they might say. 15 For any that have been deposed, I have no 16 recollection of any substantive issues. Q What are the names that you're aware of? 17 18 I've heard of Witschi. I've heard of 19 Repace. And I've heard of Bogen. Those are the only 20 names that come to mind. 21 Do you know Dr. Witschi? I know of him. We may have met at one point 22 23 in time, but I don't know him personally. Q Okay. Do you have any information regarding 24 25 Dr. Witschi's testimony in this case? 26 A At this point, I do not. I have not reviewed 27 any of his testimony. So I have no comment. I don't know 28 what he said. There may be issues that he's raised that I

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Vail, Christians & Associates (619)544-8344
    may have expertise in a particular field, particularly as
1
    it regards exposure assessment or composition of ETS. But
    at this sitting, I do not have any specific comments.
                Have you been told anything specifically
           Q
5
    regarding Dr. Witschi's testimony?
           A Not that I can recall.
7
                 Do you know Dr. Repace?
                It's Mr. Repace. But I -- and I have -- I
8
           Α
9
    know of him. I have seen him and would recognize him, but
10
    we've never met formally.
11
                All right. Do you know Dr. Bogen?
12
                No, I don't.
           Α
13
                Are there any other names that you're aware
           Q
14
    of from the plaintiffs' side of the case?
15
           A No. I can't think of any, as I sit here.
                 I want to mark as Exhibit 582, the Notice of
16
17
    Taking Expert Deposition of Michael W. Ogden, Ph.D., which
    was the notice for this deposition.
19
                 (Exhibit 582 was marked for identification.)
20
    BY MR. HULBURT:
           Q Is that something you've seen before? There
21
22
    are -- just so you know, there are two notices in this
23
    case related to you. This is the other one. We'll call
    that 583. 583 is called the "Amended Notice of Deposition
24
25
    of Defendant R.J. Reynolds Tobacco Company (Michael W.
    Ogden.)" 583 is what I refer to as the PMK notice, which
26
    lists 14 categories, plus three additional categories, of
27
    issues that we want to talk to somebody from R.J. Reynolds
28
           Vail, Christians & Associates (619)544-8344
    about.
1
2
                 (Exhibit 583 was marked for identification.)
3
    BY MR. HULBURT:
                 I think this is the one that you and I spoke
    about earlier that you had something that had a list of
5
    categories; is that correct?
                 At first glance, that would appear to be the
7
          A
8
    document that we were referring to.
9
                 Okay. So now I want to go back to 582, which
10
    is the notice of your deposition as an expert witness on
    behalf of R.J. Reynolds and -- I quess it's really R.J.
12
    Reynolds and the other tobacco defendants.
                 Have you seen this notice before?
13
                 No, I don't believe I have.
14
15
           Q
                 Have you been instructed to gather or
16
    accumulate any documents with respect to a notice for your
17
    deposition as an expert witness and produce documents that
18
    would be in your roles as an expert witness? I'm
19
    specifically interested in and referring to page 3 of
20
    Exhibit 582.
21
                Could I ask you to either repeat or rephrase
22
    the question as to what -- I'm not sure what question is
23
    on the table.
24
                 Have you been requested to collect and
25
    produce any documents related to your deposition as an
    expert witness?
26
27
                To collect and to --
           A
28
                 Produce.
           Vail, Christians & Associates (619)544-8344
1
                 -- produce. No, I don't believe I have. Let
    me -- well, the documents -- the documents have been
    produced. I mean, document citations are in my C.V.
    They're in this RJR ETS publications list. But I don't
```

recall any instance where I was specifically asked to 6 accumulate documents in accordance with your question 7 beyond those sorts of things. 8 What I'm going to try to do now is to make sure that all of the documents responsive to this page 3, 9 10 Exhibit 1 to Exhibit 582, have been produced. And so I want to go through this with you and 11 12 ask you have each -- have all of the documents responsive 13 to each of these categories been produced, to the best of 14 your knowledge? In formulating my expert opinion, or from a 15 16 company perspective, or is there a difference? 17 Q This is you, as an expert witness. And 18 that's why there are two separate notices. And this is 19 specific to you, as the expert witness. 20 And Category No. 1 was "Any and all reports and writings regarding this action, or any issue in it, 21 22 any of the parties in this action; environmental tobacco 23 smoke/secondhand smoke or any constituents thereof; claimed health consequences or risks, or the absence of 25 health consequences or risks of environmental tobacco 26 smoke/secondhand smoke or any constituents thereof; or warnings, actual or proposed, regarding tobacco smoke, 27 28 including environmental tobacco smoke/secondhand smoke." Vail, Christians & Associates (619)544-8344 87 1 Have all of those documents been produced with respect to your role as an expert witness in this 3 As far as I know, yes. I'm a little 4 5 confused, because if I'm understanding your question, my understanding is that my ${\tt C.V.}$, this list of ${\tt RJR}$ 6 7 ETS-related publications, and the list of bibliography of 8 documents relied upon by myself is what you're asking for in response to this case. 9 I do not have any other document in mind 10 right now that I would add to any of those lists, but I 11 would say cumulatively, those documents are what you're asking for, if I'm understanding your question correctly. 13 14 Let's do No. 2, then. 15 No. 2 is "All materials provided to deponent 16 by any Defendant or any representative or any attorney of 17 any Defendant." We've talked about documents that you 18 received, which I understand are not here today. So I 19 20 don't need to do that again. 21 Other than the documents that we've talked about that you've received which are in the notice, and 22 23 the Carchman depo, have you produced all documents received from any of the attorneys or any of the parties? 25 Well, I believe so. I mean, again, I was Α 26 given a copy of Dr. Carchman's deposition as an example, 27 but I did not produce another copy of that. I presume one 28 exists. Vail, Christians & Associates (619)544-8344 88 I can't think of anything that has not been 2 3 produced that I have. Okay. No. 3 is "All writings representing, 5 recording, or referring to any work done by or at the 6 direction of the deponent in connection with this lawsuit, 7 including but not limited to originals and drafts of: Reports, test results, notes, correspondence, data records, photographs, time sheets, diaries, e-mail, logs,

```
10
    and billing records."
11
                  We talked a little bit about notes and
12
    letters and e-mails that you may have had, may not have
13
    had, and some that you retained or did not retain. I
    don't want to do that again.
14
15
                  Is there anything else, as you read this
    No. 3 now, that you would have that would be responsive to
16
17
    that request?
18
                 No, not that I can think of.
           Α
19
                  Do you keep anything that you would call a
            Q
20
    log?
21
22
                  Did you prepare any reports related to this
            Q
23
    case?
24
                 No. Well, I've not prepared anything
25
    specifically regarding this case.
                 That was my question.
2.6
           Q
27
                 Okay. There are obviously --
           Α
28
                 I don't want to do the publications again.
           Vail, Christians & Associates (619)544-8344
                                                                89
    I'm asking if you prepared a report related to
 1
     specifically this lawsuit.
            Α
                  No.
 4
            Q
                  No. 4 is "All writings referred to or relied
 5
    on by the deponent in formulating any expert opinion in
    this matter or any expert opinions to be given at trial in
 7
    this action or expected to be given."
                  I understand that Exhibit 581 is intended to
 8
 9
    be the compilation of that.
10
                  Is that your understanding?
11
                  MR. MILES: Counsel --
12
                  MR. HULBURT: Yes.
13
                 MR. MILES: -- I don't mean to interject, but
   you're in the area that I was handling.
14
                  Is your question intended to suggest that
15
16
    only the exhibit was produced to satisfy this question, or
17
    are you saying is this one of the things that was produced
18
    in response to this inquiry?
19
                 MR. HULBURT: All right. I'll ask it again.
20
    BY MR. HULBURT:
21
                 Have we already talked about every document
22
    that would be responsive to this Item No. 4?
                 MR. MILES: I don't -- let me -- go ahead.
23
24
                  You can answer only if you can.
25
                  THE WITNESS: I believe that we have.
26
    believe that I have. I believe that that's what these
    documents -- and realize that some of these documents cite
27
28
    to -- you know, to lists found elsewhere.
            Vail, Christians & Associates (619)544-8344
 1
                  For example, the bibliography document has an
 2
    entry that says and all documents listed in my C.V., for
 3
    example.
 4
                  I believe that is all that I have that is
 5
    responsive in this case. I certainly would hold out the
 6
    possibility that in the progression of this litigation,
 7
    there may be new things that become aware, new
 8
    publications in the literature, etcetera, that would be
 9
    responsive.
                  But at this point in time, I believe that
10
11
    these encompass -- these three documents that we have been
12
    talking about, encompass my expert opinion or the facts
13
    that I have relied upon.
14
    BY MR. HULBURT:
```

15 That answer triggered another thought. 16 When we went through the publication and you 17 added -- we were going through your C.V. and you added the 18 Part 2 that's in press that's going to be published in The Analyst, is that a document -- a publication that you will 19 20 be relying on in any way for any of the opinions in this 21 case? 22 I cannot think of anything in that document 23 that I will rely on here, no. 24 Is there any -- well, I don't want to say 25 work in progress -- which is not yet published which you intend to rely on for any of the opinions you have in this 27 28 MR. KODSI: Objection to the extent that Vail, Christians & Associates (619)544-8344 91 1 calls for speculation. But if you can answer, you may. 2. 3 THE WITNESS: For the issues that I am aware of at this point in time and for the area of expertise that I intend to offer opinions on, my answer to your question is no. 7 BY MR. HULBURT: Okay. I'm trying to capture the thought 8 Q 9 because you might be right. Maybe an article comes out where we're in the middle of this thing and we're all 10 11 going to read it and figure out what it means. 12 And I'm trying to capture the thought that maybe you're better aware of that, that you, certainly 13 better than I, would know what's out there, what's in 14 15 progress, what's coming, and maybe even when it's coming. 16 So I want to know whether you're aware of 17 ongoing research, perhaps even the results of any ongoing 18 research, that you intend to rely on for any of the 19 opinions in this case. 20 MR. KODSI: Same objection. Asked and 21 answered. 22 But you may answer again. THE WITNESS: Again, I would put the caveat 23 24 on it, that relates to issues of which I am aware now. 25 My expectation is that I may comment on 26 testimony of other witnesses in this case, and to the 27 extent that would require me to support an opinion that's currently not on the table, then I would think I would do 28 Vail, Christians & Associates (619)544-8344 1 that. 2. But as I understand the issues right now, I'm 3 not aware of anything that is work in progress that would be responsive to the issues, as I understand them at this point in time. 6 BY MR. HULBURT: 7 Q Okay. Let's look at category 5, then, which requests "All writings to be discussed by the deponent 8 while testifying at trial, or expected to be so discussed, 9 10 including but not limited to any writings for which the deponent's testimony will, or is expected to, provide the 12 evidentiary foundation, in whole or in part, for admission into evidence of such writing." 13 14 I didn't write that. 15 And I'm not sure I understand it. But it's --Α 16 That's a lot of lawyer involved in that one. 17 I think the thrust of it is in the first couple words. It's a catchall thing that says produce everything that 19 you intend to use for any of your testimony in this case.

20 And so let me just ask that catchall 21 question. 22 Have we either discussed or have you produced 23 all of the writings that you intend to rely on for your testimony in this case? 25 I believe that we have, in the context of things that I am aware of now and that I anticipate now. 26 27 To the extent anything new arises, there may be something different, but my expectations today, the 28 Vail, Christians & Associates (619)544-8344 93 reliance documents that meet those expectations I believe are accurately captured in the documents that we've talked about. Have you done all the work you think you need 5 to do in order to be prepared to testify as an expert 6 witness in the case, right now? 7 With the caveat that there may be additional work required to comment on testimony of other witnesses. 8 9 I think the -- you know, I would reserve the right to, 10 obviously, do additional work in that regard I think. But with the opinions that I've -- that I am 11 12 expecting to offer at trial, I think I have those -- that 13 work is largely done. 14 Other than possibly reviewing documents 15 before trial or something like that, to refresh my 16 recollection. Okay. Other than this, the caveat that you 17 have put out of the possibility of responding to other 18 witnesses' testimony, is there any work that you wanted to 19 do in this case but have not done for whatever reason? 21 Work related to preparing yourself to testify as an expert witness. 22 23 No. There's nothing I can think of that I 24 would characterize as work I've wanted to do and haven't had time to do or anything like that, no. 25 MR. HULBURT: All right. Let's go off the 26 27 record. 28 (Lunch recess.) Vail, Christians & Associates (619)544-8344 1 San Diego, California; Wednesday, July 12, 2000; 1:42 p.m. EXAMINATION (RESUMED) 3 BY MR. HULBURT: 5 Q What is your understanding of the areas that 6 you've been asked to testify about as an expert witness in 7 this case? 8 My understanding is I'm expected or may be Α 9 asked to testify about environmental tobacco smoke 10 exposures, chemistry of environmental tobacco smoke, 11 research that Reynolds and possibly other defendants have 12 conducted in the areas of ETS exposure assessment and 13 chemistry, issues related to testimony issued by other 14 witnesses in the case in their fields of expertise. 15 You mean if they testify about those same areas? 17 Α Sure. 18 Uh-huh. Q 19 I think broadly speaking, that's what I would 20 say I'm anticipating doing. 21 Okay. Q 22 MR. KODSI: And let me just enter for the 23 record, since we did provide an expert disclosure statement for Dr. Ogden that I think has actually been

```
marked as an exhibit, to the extent that there's anything
    in there that Dr. Ogden didn't mention, obviously, he will
    be testifying about that as well.
27
28
    BY MR. HULBURT:
           Vail, Christians & Associates (619)544-8344
1
                All right. That's kind of what I was trying
    to understand because sometimes the declaration says more
    than, in real life, the person is really going to say.
    Sometimes it says less than, in real life, the person is
    going to say. And so what I'm trying to capture today is
    what are you really going to say.
                 Is there anything -- well, let me show you --
    have you go back to -- maybe it was not marked as an
 8
 9
    exhibit.
                 MR. KODSI: I think it was.
10
                 MR. HULBURT: I think I've showed it to
11
12
    you. But let me show it to you, and we'll call it 584,
    which is the expert witness declaration on behalf of the
13
    various tobacco defendants we mentioned earlier.
                 (Exhibit 584 was marked for identification.)
15
16
    BY MR. HULBURT:
17
                Page 11 is where it talks about you. I want
    you to take a look at this again. Specifically, paragraph
18
    12c is where it says "Dr. Ogden will testify regarding,"
19
20
    and it follows.
21
                 And read that again if you need to.
                 The question is going to be are there any
    other areas besides that that you understand you're going
23
    to be asked to testify about?
           A Well, no, I don't think there's anything in
    addition that I would add to this. I think there are a
    couple of things here that I may not have mentioned in my
27
    previous answer that I certainly would intend to testify
28
           Vail, Christians & Associates (619)544-8344
    about to the extent I was asked questions about them.
                All right. Let's -- I want to spend some
    more time on this Exhibit 581, which is the Bibliography
    of Documents Relied Upon By Dr. Michael W. Ogden.
                 There are, by my count, I think, 120 total
 5
    articles listed there. I don't know if you know that or
    not. I'll just represent to you there are 120 total
    articles listed there.
 8
                 I want to know of these articles, I'm
 9
10
    presuming that you give different weight to different
11
    articles.
12
                  Is that a true statement?
                 Many articles, of course, are going to
13
           Α
    contain data and commentary on a variety of issues. Even
    within a given article, I would give more weight probably
15
16
    to some areas than others as it relates to my expertise.
17
                 So for a given purpose, I would weight one
18
    document higher than another, and for a different purpose,
19
    I may reverse the order.
20
                 So, sure, on a given issue, documents could
21
    be weighted, I suppose, in terms of relevance or accuracy
    or whatever, but that may change from document to document
    or from issue to issue.
23
           Q Do you give different weight to articles
    that appear in peer-reviewed journals compared to articles
26
    that are not in peer-reviewed journals?
27
           A Generally, no.
28
                 Why not? How do you evaluate an article with
           Vail, Christians & Associates (619)544-8344
```

respect to the subject of whether it's been peer-reviewed? 3 MR. KODSI: Objection; incomplete hypothetical to the extent that he would weigh articles differently depending on what he's looking for. 6 But I'll allow him to answer. 7 THE WITNESS: Can I ask you to restate or 8 rephrase the question. BY MR. HULBURT: 9 10 Sure. Q 11 What is the significance to you in reviewing 12 an article as to whether or not it's been peer-reviewed? A Peer review is a philosophical process, if 13 14 you will, that is intended to ensure that data are and 15 conclusions are scrutinized by people knowledgeable in the 16 field, and there is some degree of assurance that having other scientists review your work is helpful in catching 17 18 errors, typographical errors, possible overconclusions 19 based on the data, possibly inaccurate or incomplete 20 descriptions of data. So there is some review that may 21 help in that regard. It is by no means a guarantee. 22 By peer-reviewed literature has the advantage 23 of having a formal process by which other scientists 2.4 review the work, most nonpeer review -- or at least what I'm interpreting your question to ask about nonpeer review 25 26 literature, most of that has some degree of review in it as well. So there is not necessarily a large or even a 27 measurable degree of a difference in confidence to the 28 Vail, Christians & Associates (619)544-8344 98 data. 2 So is it your understanding, then, that in your day-to-day practice, in your field, in your science, 3 you draw no distinction between an article that is peer-reviewed or not peer-reviewed, based on that factor alone, the factor of whether it's peer-reviewed or not 7 peer-reviewed? 8 That is a distinction that can be made. That does not in and of itself dictate to me that one data set 9 10 of one report is of higher equal than another. 11 I, as a scientist, will generally look at the 12 data. I'll look at the methodology that's described. I'll look at the references that are used to support the 13 various contentions or statements, and I decide for myself 14 is this quality stuff? Is this relevant or, you know, 15 16 put a -- I think you used a weighting or ranking. I don't 17 know that I do that. But I draw my own conclusions about 18 the quality of the science and how good it is. 19 Peer review is potentially useful in that 20 area, but I don't really use it in that way. It's not a 21 gold standard, if you will, that guarantees anything. 22 It's a process by which some papers have gone through and 23 others haven't. In some cases, it can be useful. In some cases, I don't know that it is useful. 24 25 I'm trying to understand from your perspective in the real world, does it mean anything to 27 you as the scientist, when you're going through and doing a literature search, trying to review the accumulation of 28 Vail, Christians & Associates (619)544-8344 literature, something like we have this exhibit that has 1 120 articles in it, when you are trying to become aware of 3 a body of research, does it matter to you whether the article has been peer-reviewed or not peer-reviewed, in the real world, day to day? Does it have any significance

```
6
    to you at all?
 7
                 MR. KODSI: Objection; vague, compound.
 8
                 But you can answer.
 9
                 THE WITNESS: I hesitate to say that it has
    no significance to me, but it is not of major consequence
10
11
    to me, no.
    BY MR. HULBURT:
12
13
                 How would you describe its significance to
           Ω
14
    you in the real world, whether an article has been
15
    peer-reviewed or not?
                 Well, by stating that an article is
16
17
    peer-reviewed, that is an assurance that some group of
    people, possibly only one or two, maybe three or four of
18
19
    scientists who are supposedly knowledgeable in the field,
20
    have scrutinized a piece of work and have gone over it
21
    with a fine-tooth comb, if you will.
22
                 But having published a number of papers and
23
    seen the review process and been the reviewer of many
    other papers and seeing other reviewers' comments, I
25
    recognize that there's a broad spectrum of quality of peer
26
    review.
27
                  By nature of the peer-review process, it is
28
    largely an anonymous process. So one doesn't know by
                                                                100
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1
    looking at a paper in a journal, I don't know who reviewed
    it. I'm trusting that the editor chose people that were
    objective and had expertise relevant to the subject
    matter. I don't know that for a fact.
 4
                 So all I can say about peer review is that it
 5
 6
    is an assurance that some more eyes have looked at the
 7
    paper, but it's not a guarantee of quality. So I can say
    with certainty that that means an additional person or two
 8
 9
    or three have reviewed this work, but I don't know how
    thoroughly they reviewed it. I don't know their
10
    qualifications to review it. I don't know how objective
11
12
    they were in their review. So I can't give it a stamp of
13
    approval based on that because it's not a perfect process.
14
    BY MR. HULBURT:
15
                 Do you give any less stamp of approval to the
           Q
16
    article that's not gone through any of that review?
17
                In general, no. Not because of the lack or
18
    the presence of peer review. What you find in some
    nonpeer-reviewed literature are less than adequate --
19
20
    sometimes you may find less than adequate descriptions of
21
    the experimental detail. And there may be other issues
22
    that it's a very abbreviated reference list, for example.
23
    And there might be some indications that these were things
    that could have been tidied up with peer review. And with
25
    a given paper, it could have been a better publication had
26
    some additional reviewers looked at it. But just because
27
     it is or isn't, isn't a large issue in my mind.
                  As I said a moment ago, I judge a quality of
28
           Vail, Christians & Associates (619)544-8344
                                                                101
    a manuscript based on the content, as I see it.
 1
           Q
                 For what journals have you acted as a peer
 3
    reviewer?
 4
                 There are several. I've acted as peer
 5
    reviewer for a journal called Analytical Chemistry.
    Environmental Science and Technology. The Journal of
 6
 7
    Chromatographic Science. The -- the name escapes me.
 8
                  I believe it's called Aerosol Science. I've
 9
     reviewed for Tobacco Science. There's an international
     journal that I review for that's called Beitrage Zur
10
```

```
Tabaksforschung International.
11
12
         Q She will pick that one up later.
13
           Α
                 There may be more. That's just a list that
14
    comes to mind.
                Are you currently on any panels where you're
15
           Q
16
    a peer reviewer for any journals? I don't know if that's
    the right concept, but where you're on a list or on a
17
18
    panel to be a peer reviewer?
           Α
              Sure.
19
20
           Q
                Right now?
21
                Yeah.
           Α
22
                For the journals that you just mentioned?
23
                In fact, yeah. In my briefcase in my room,
24
    I've got three manuscripts that have been submitted to me
25
    for peer review that I hope to get to on the plane ride
26
    home.
27
                 Okay. Give me an estimate of the number of
28
    articles for which you've been one of the peer reviewers.
           Vail, Christians & Associates (619)544-8344
                                                              102
1
           Α
                 In my career?
           Q
                 Yes.
                This is an estimate. I would guess somewhere
    in the neighborhood of two to three dozen.
5
           Q All right. And when you perform that task,
    do you believe it's a worthwhile process?
6
7
                Yes. Because I put a serious amount of
    effort into it. I will -- in many cases, I've written
8
    reviews longer than the manuscript itself.
9
                And do you believe that your process of peer
10
11
    reviewing articles benefits the science?
12
           A I do.
13
                Do you have some impression about you because
           Q
14
    of your years in the profession that most of the peer
    reviewers are good or most are not good or 90 percent are
15
    good or do you have some sense about that in your mind?
16
                 MR. KODSI: Objection; overbroad.
17
18
                 But certainly you can answer it, to the
19
    extent you can.
                 THE WITNESS: I never thought about it in
20
21 terms of percentage. I hope that members of the
22 scientific community that are called upon to perform peer
23
   review take it with a fair amount of intensity and
    responsibility in mind. I have no guarantees of that, of
24
25
    course.
26
                 My expectation is that the majority of peer
27
    reviewers are taking this responsibility seriously and
    perform at least an adequate job. I know that there are
28
           Vail, Christians & Associates (619)544-8344
    degrees within that. Some people do more. Some people do
    less. I see that in other reviews that are written on the
    same papers that I review. I've seen that in the
    reviewers' comments that are supplied to me when I publish
5
    papers.
6
                 So you see a range of responses. My
7
    expectation is that more than not take the job
8
    responsibility and do a good job.
9
    BY MR. HULBURT:
10
               Is it your perception that that's yours at
    least 90 percent of the time?
11
12
           A I have no way of quantifying that.
13
                Let's look at Exhibit 581 together, the
           Q
14
    bibliography.
15
                 The first article there is -- what is the
```

```
16
     journal there? Is that published in a journal? What is
17
    that?
18
                No. That's a stand-alone booklet. It's not
19
    a journal article.
                Okay. So that's not something that's
           Q
21
    peer-reviewed?
22
           A I believe there is a committee that is
23
    responsible for updating and publishing that book.
    Presumably, all the committee would have input into
24
    it. But in terms of the peer-review process, as you've
25
    characterized it and as I understand it, in terms of
26
27
    journal submissions, no, that would not be
28
    peer-reviewed. But it's a government booklet publication
           Vail, Christians & Associates (619)544-8344
                                                              104
    that, you know, was not written by a single person.
    assume it was written by a committee. There may be an
    editor associated with that who I presume has
 3
    responsibility and could act like a peer reviewer. But I
    don't know the exact process in which that booklet is
 6
    reviewed.
 7
                Is that a booklet that's focused on
           Q
    occupational exposures?
 8
           A In general, yes. The booklet -- the acronym
9
10
    ACGIH is American Conference of Governmental Industrial
    Hygienists. The industrial hygiene field is generally
11
    regarded with workplace types of exposure.
                As opposed to residential?
13
           Q
14
           Α
                Correct.
                Is there any relevance with respect to that
15
16
    booklet with respect to residential exposures?
17
                 MR. KODSI: Objection to the extent it calls
18
   for a legal conclusion.
19
    BY MR. HULBURT:
                 I'm asking the expert witness conclusion.
20
           Q
21
                Yes. The book contains a variety of sections
    and tables. Many of the sections deal with exposure
22
23
    issues that would be relevant both to workplace and
24
    nonworkplace exposures.
25
                 Certainly, the definitions and the supporting
26 text would be relevant for exposure in general. So I
27
    think there is relevance beyond the workplace.
28
                All right. The next one, the Bohanon paper,
           Vail, Christians & Associates (619)544-8344
                                                               105
    is that a paper that was presented at a conference as
    opposed to something that is part of a journal
 3
    publication?
                Based on this citation, I would say probably
           Α
    neither of those two. This is published in the
    proceedings of a conference. It may also and I would say
 7
    likely that it was presented at that conference as well.
    That's the way most conference proceedings emanate. It's
 9
    a presentation, and then generally soon thereafter, a
    written version of that is published in a book or a
10
11
    journal. So this citation is the proceedings of the
    conference. It may -- it may have been also presented,
13
    but I can't guarantee that.
14
                 Is that a peer-reviewed article?
           Q
                 I don't know. I would have to look at the
15
    proceedings and -- one could dig into it and find out
16
17
    whether it was. I don't know whether it is or not at this
18
   sitting because of -- you know, I've submitted manuscripts
19
    to conference proceedings. Some of those are reviewed by
20
    a committee. Some of those are not. I don't know whether
```

this one is or not. I've never been the principal author 22 of anything published in that particular proceeding. So I 23 can't say. 24 Q What's the relevance of this article to 25 residential exposures? 26 A Well, by its title, it only refers to a 630,000-square-foot office building. So I assume the 27 28 thrust of this paper -- and, well, the thrust of this Vail, Christians & Associates (619)544-8344 106 1 paper would appear to be the operation and maintenance of air quality handling systems in an office building. The relevance could be very much related to 4 the home environment as well. There may be 5 descriptions -- I can't -- you know, without reviewing the paper, I can't tell you exactly what that paper describes. 7 0 Yeah. I --I know these authors, and I know some of the 8 Α 9 work they do and some of the type of the work they do. There could be a variety of engineering solutions and 10 11 models and other things that could be presented there that could be relevant in venues other than office buildings. 12 Q Let me jump in because I'm specifically not 13 trying to ask you to speculate about it. 14 15 A Okay. So, as you sit here right now, other than 16 17 reading the title of the paper as we see on this exhibit, do you know anything about what's in that article? Because I don't want you to speculate about it. I can 19 read the title too, and I kind of had my thoughts about 20 what that title means. But if you don't know the 22 substance of the article, then I don't want you to speculate about it. 23 24 A Well, I presume -- well, as in most of these, 25 I'm presuming that the title reflects the major content of 26 the paper. 27 You asked me was it relevant beyond what's 28 listed in the title, and without reviewing the paper, I Vail, Christians & Associates (619)544-8344 107 couldn't tell you. I don't know. 1 2. I'm interested in that because this is the bibliography of documents that you've relied on for purposes of this case as an expert witness. From my perspective, this is a case about residential exposures. 5 6 So one thing I'm going to be interested in 7 for all these articles is what's the relevance from your 8 perspective as the expert witness of this article to 9 residential exposure. 10 A Well --11 So some of them, I'm assuming you're familiar 12 with the article and you'd be able to answer that question. Some of them, maybe you don't have the article 13 at hand. And so I don't want you to speculate about it, 14 15 but I want to know what your thought about it is. 16 MR. MILES: Counsel, are you stipulating that 17 this case is limited to residential exposures? 18 MR. HULBURT: No. No. But I'm going to continue to ask what's the relevance to residential 19 20 exposures. 21 THE WITNESS: Without reviewing the 22 manuscript or the paper -- and you've indicated that there 23 is approximately 120 citations here. I haven't reviewed 24 most of these in recent history. Many of these papers, I 25 co-authored. Many of these papers, I probably haven't

```
26
    read for a year or more. I haven't committed all the
27
    details to memory, obviously.
28
                 There -- it's certainly possible that this
           Vail, Christians & Associates (619)544-8344
                                                               108
    paper contains information that is relevant to home
    environments.
    BY MR. HULBURT:
                 All right. But you don't know, as you sit
5
    here?
6
                 I don't know. I mean, operation and
7
    maintenance procedure could -- is likely applicable to
    HVAC systems which could also be applicable to heat pump
9
    systems, furnaces that would be used in homes. I'm sure
    there is information in there about general information
10
11
    principles about controlling and filtering air and
12
    bringing in fresh air. Those would be applicable to any
    enclosed setting.
13
14
                 But as I sit here today, without reviewing
15
   that paper, I can't give you any specifics about the home
    environment.
16
17
                 Bohanon and Curl, were they both R.J.
           Q
18
    Reynolds employees in 1994?
19
              Yes, they were.
           A
20
                 The next Bohanon article is something at the
21
    7th International Conference on Indoor Air Quality and
    Climate in Tokyo.
                 Is it your thought that that's a paper that's
23
    presented at that conference?
24
25
                Again, the citation is to a conference
    proceedings. My expectation is that that was also
27
    presented at the conference in an oral fashion.
28
           Q Okay. Is that peer-reviewed?
           Vail, Christians & Associates (619)544-8344
                                                               109
                It probably is. I don't know. I don't have
    anything that I've been the principal investigator of
    that's published in that particular conference
    proceedings. I know that there is an editor. In fact, it
    lists the editors here. There are several -- my
5
    expectation is that the editors would have reviewed those
6
7
    papers. There are five names listed.
8
                 I would presume that that is peer-reviewed by
9
    at least those five people.
                You don't really know?
10
           Q
                 Beyond that, I don't know.
11
12
                 Okay. And do you have any of the information
13
    about this article at hand now so that you can tell me
    what's the relevance of this article to residential
14
15
    exposure?
16
                 I think the answers are largely the same as I
17
    gave on the previous publication. These are listed in
    alphabetical order and not in any list of importance.
18
19
    We're in the b's.
20
                 This is a paper that, by its title, describes
21 the effective ventilation rate on air quality perception
    in a relatively large office building. The relationship
23
    between ventilation rate and air quality perception is
24
    also applicable in homes.
25
                 Whether or not these authors in this
    particular paper delve into the possible applications in
26
27
    the home environment, again, I can't tell you without
28
    reviewing it. I don't know.
           Vail, Christians & Associates (619)544-8344
                                                               110
1
                 Okay. The next Bohanon article is from the
```

Proceedings of the ASHRAE Conference. 3 So would your answers be similar to the 1993 ASHRAE conference, that that's probably part of a paper or part of the proceedings and you don't know whether it's peer-reviewed? That's correct. It's ASHRAE conference 7 Α proceedings in a different year from the one you asked me 8 9 about two ago -- two entries ago. 10 Q Right. 11 Is that --12 Α Go ahead. 13 Were you finished? Q 14 Α Yes. 15 Is that an article that you're familiar with Q 16 the substance of it, as you sit here now, other than the 17 title? 18 Α I know that I have read it some point in 19 history. I have not reviewed it recently. It describes by its title the effects on ETS smoke concentrations. 21 Those issues would be relevant to homes as 22 well as offices. 23 Q Right. 24 But are you aware of any of the information 25 in this article, as you sit here now, other than the title? I mean, I can read the title too. 26 27 A No. I can't recall any specifics about that 28 study. It was published five years ago, and it could Vail, Christians & Associates (619)544-8344 111 likely have been several years since I've seen it. 1 Okay. Let's do the next Bohanon article on 3 indoor air quality on the 630,000-square-foot office building in North Carolina. That seems to be similar to 4 5 the second one, published in the proceedings of a conference. 7 Same questions about that. 8 Is that peer-reviewed? Do you know anything about that article? Do you know if it has any relevance 9 to residential? I know those are three questions, but I'm 10 going to trying to go a little faster. 11 12 Α Well, the first Bohanon citation you asked me 13 about has a similar title to this. So it strikes me as 14 being largely another description of the same study. And my answers would be largely the same as given previously. 15 The title does not indicate anything about home 17 environment, but I'm sure the engineering principles that 18 are described there would be applicable in the home 19 environment. 20 Q Other than the title, is there anything about 21 that article that you can tell me, as you sit here today? 22 No. 23 The next one, Brunnemann, is published in a 24 journal Carcinogenesis. 25 That is a peer-reviewed journal? 26 Α I believe so, yes. Okay. And are you familiar with that article? 27 28 I've read the article. It's eight years old, Vail, Christians & Associates (619)544-8344 but I haven't reviewed it any time recently. As you sit here now, can you tell me anything 0 3 about the substance of that article? I do recall that there were -- that that article contained a description, according to the title, "Analysis of tobacco-specific N-Nitrosamines in indoor

```
air," that it contained what I would call some contrived
    environments that were -- that, you know, they described
   the difficulty in measuring nitrosamines. There's a
10 description of some -- what I would call, I guess, unusual
11 or maybe unusually high levels of exposure type of
12
    environments where they had to go to find results.
13
                 But that's my recollection of that paper.
14
                 Okay. Let's do the next one, then.
15
    Published in Environmental Science & Technology.
                 Is that a peer-reviewed journal?
16
17
                 Yes, it is.
18
                 All right. And do you know anything about
    that article other than the title, as you sit here now?
19
20
                Yes, I do.
                That's one that you're familiar with?
21
           0
                Yes. I'm the co-author on it.
22
           Α
23
                Okay. I missed your name. All right.
           0
24
    Good.
25
                The next one, Caldwell, published in, what is
26 that, the Journal of Association --
27
                 Of Official Analytical Chemists.
28
                 -- of Official Analytical Chemists.
           Vail, Christians & Associates (619)544-8344
                                                              113
1
                 Is that a-peer reviewed journal?
2.
           A
                Yes, it is.
3
                Is that an article that you're familiar with?
           Q
           A
                Yes, it is.
5
                Did you have any publication role in that one?
           Q
6
                At the time -- this author and his co-authors
           Α
7
    worked for R.J. Reynolds at this time when this work was
8
   done. They reported to me, yes.
9
                All right. The next one is published in
           Q
10 Fundamental and Applied Toxicology.
                Is that a peer-reviewed journal?
11
                 I believe so, but I'm not sure.
12
13
                Has it been your personal practice when you
    do scientific research and you publish an article, that
15
   you -- that you personally prefer to get it published in a
16 peer-review journal?
17
           A
               Generally, that's true.
18
           0
                Why?
19
               Because of water circulation.
           Α
                Is it your perception as a researcher, as a
20
21
    author, that an article published in a peer-review journal
22
    will bring greater recognition to the author?
23
           A You're asking me for my own personal
    professional experience?
24
25
           Q Right.
                 No, that's not true, from my professional
26
           Α
27
    experience.
28
                 The next counter article is published in
           Vail, Christians & Associates (619)544-8344
                                                              114
    Environmental Technology.
1
                 That's not a peer-reviewed journal, is it?
3
           Α
                 It is.
4
                 It is?
           Q
5
           Α
                Uh-huh.
 6
           0
                 Is that an article published by RJR employees?
7
           Α
                 Yes, it is.
8
                 The next one is the American Journal of
           Q
9
   Epidemiology?
10
          A
                 Uh-huh.
11
           Q
                 Is that a peer-reviewed?
```

```
12
           Α
                 Yes.
13
                 What's the next one? Coultas.
           Q
14
                 What kind of publication is that?
15
                 Well, the title indicated is Combustion
    Processes and the Quality of the Indoor Environment. I
16
17
    don't have any specific recollection. I am -- well, I
    hate to speculate. But by the citation, the way it's
18
19
    given, it looks to be probably something equivalent to a
20
    conference proceeding.
21
                 You don't know what that is, as you sit here
22
    now?
23
                No, I don't.
24
                How about the next cross article.
           Q
25
                Okay. What about it?
           Α
26
                 Same questions. Is that peer review? Are
27
    you familiar with it? As you sit here now, do you know
    anything about that article other than the title?
28
           Vail, Christians & Associates (619)544-8344
                                                               115
1
                 Yes, I do. I know something about that.
                 The publication is listed as the Proceedings
3
    of the 1990 EPA/A&WMA International Symposium on the
    Measurement of Toxic and Related Air Pollutants.
                 For a number of years, this was a conference
5
6
    that was held in the Research Triangle Park area of North
7
    Carolina sponsored by the U.S. Environmental Protection
    Action and the Air and Waste Management Association. It's
    a fairly large volume. I don't know whether it's
    peer-reviewed or not. It has editors. Papers prior to
10
    their inclusion in the proceedings would be submitted to
11
    the editors. They generally are papers that have also
13
    been presented orally at the conference.
14
                 This particular paper describes differences
15
    between area monitoring and personal monitoring for
    determining nicotine as an environmental tobacco smoke
16
17
    component.
18
                 Is that an RJR publication?
           Q
                 There are two authors listed. Crouse, at the
19
    time, was an employee of Lorillard Tobacco Company. And
20
    Oldaker, at the time, was an employee of R.J. Reynolds.
21
22
                All right. The next Davis article is from an
23
    International Conference on Indoor Air Quality and Climate
24
    in Japan. We've talked about that before.
25
                 Is that an article that you're familiar with?
26
                 I have read it, sure.
27
           Q
                 As you sit here now, do you know any of the
28
    substance of that article?
           Vail, Christians & Associates (619)544-8344
                                                               116
1
                 The next one published in Excerpta Medica, is
    that a peer-reviewed journal?
                 I don't know. It appears to be a book title,
    Present and Future of Indoor Air Quality. By the number
5
6
    of pages listed, it must be fairly large. And it has a
7
    volume number. So I'm not sure what that is.
8
                 You're not sure what that publication is?
9
                 Well, no. I'm not sure what the nature of
    the citation is. I believe it is a book. I don't know
10
11
    whether it's a conference proceedings or if it's some
    other type of book. I'm not sure.
12
13
                 Okay. The next one is published in the
           Q
14
    Proceedings of the 1988 EPA/APCA International Symposium.
15
                 Is that peer-reviewed?
16
                 A similar answer that I gave you earlier on
           Α
```

```
another -- to another question, in that this is -- this
17
18 is, in essence, the same conference. They change their
   name. This is EPA/APCA. The previous one was AWMA.
20
    That's the same organization. They just renamed
21 themselves. It's a fairly large book.
22
                Again, I'm a co-author on this particular
    paper along with some university researchers. There is an
23
    editor, but not being the principal author, I don't recall
25
    the submission and review process that might have gone on
26
   in that paper.
27
                Okay. The next article is from a different
          Q
    year. The Proceedings of the 4th International Conference
           Vail, Christians & Associates (619)544-8344
                                                             117
    on Indoor Air Quality.
1
2
                The same answers with respect to that as
    we've talked about on the other indoor air quality
4
   conferences?
5
                I have been the principal author on some
          Α
6 papers published under the Proceedings of the Indoor Air
7
    series. And although I can't speak to this particular
    year, the ones that I have submitted to, I would consider
    them peer-reviewed because I know the editors reviewed
9
    those, made comments to the authors and -- you know, prior
10
11 to publication.
12
           Q
                How about the next one, Proceedings of the
13 79th Annual Meeting of the Air Pollution Control
14 Association.
                 Is that -- what kind of -- it says "Paper."
15
16
                 Where is that published?
17
                 This was a presentation that was made that
18 was also published. I believe that this particular
19 association -- this is what the APCA stood for in the
20 previous answer, Air Pollution Control Association. I
    don't know whether they put those together as a book, but
22 I believe they did put those together as stand-alone
23
    papers that they had available for anyone who wanted to
    request a copy.
           Q Is that peer-reviewed?
25
26
                I don't know.
           A
               The next is the Gilpin article that we talked
27
28 about earlier today, published in Nicotine & Tobacco
           Vail, Christians & Associates (619)544-8344
                                                            118
1
    Research.
                And if I remember correctly, you said you
3
    didn't know if that was a peer-reviewed journal?
4
          A
                That's correct.
5
           Q
               Okay.
                I'm not generally familiar with that journal.
           Q Okay. Is that an article that you obtained
7
    yourself, or an article that the lawyers provided to you?
9
     A The copy I have was provided to me by
10
   Mr. Kodsi.
11
                Was it an article that you were aware of
12 before discussing it with Mr. Kodsi?
13
           A No.
14
                 The next is published in -- I don't know what
    "Reg" stands for in this context. Reg Toxicol and
15
16
   Pharmacol.
17
                 Do you know what journal that is?
18
                It's not one I have great familiarity with.
   I believe the "Reg" stands for regulatory. So it would be
    Regulatory Toxicology and Pharmacology. I'm not
21
    100-percent sure of that.
```

```
22
                 Do you know what year that was published?
               Not as I sit here, no.
23
           Α
                Do you know anything about that article? I
2.4
25
    don't know if it's an article. Do you know anything about
26 that publication, as you sit here now?
27
                 I do recall that these authors engaged in a
    description and discussion of the differences between
28
           Vail, Christians & Associates (619)544-8344
    mainstream smoke and environmental tobacco smoke, and that
1
    roughly is the title of the paper. Their conclusions were
    that there were significant differences between mainstream
    and ETS. But I can't give you any more than that, as I
    sit here today.
5
6
                And you don't know if that's peer-reviewed?
           Q
7
           Α
                 I don't know.
8
           Q
                 The next green article, 1996, a CORESTA
9
    Information Bulletin.
10
                 What does that mean?
11
                 That is a -- roughly equivalent to a
   conference proceedings. In fact, I think this is a
12
    conference proceedings that is published by the group
13
    whose acronym is CORESTA.
14
15
               So an information bulletin is what in that
          0
16
    context?
17
           Α
                 Magazine type of thing. I mean, it's
    professionally reproduced and bound, but it's a soft
    back. You know, it's not a hardback book. It's broadly
    equivalent to a conference proceedings.
20
                Is that peer-reviewed?
21
           0
               No, it's not.
22
           Α
23
                The next is Green and others, Letter to the
           Q
    Editor, in Environmental Health Perspectives.
24
25
          A Uh-huh.
               Is Environmental Health Perspectives a
26
    peer-reviewed journal?
27
28
           A I believe that it is, yes.
           Vail, Christians & Associates (619)544-8344
                                                               120
                 The Letter to the Editor, that would not be?
1
    That's just what it says? That's a letter that those
2.
3
    people chose to wrote, commenting on some other
    publication?
5
                That is what this would be, yes. I have
    experience with Letters to the Editor. They are reviewed
6
    by the editors, and, generally, they are sent to the
7
8
    authors of the article that are being commented upon for
9
    comment. So I would say, yes, that is reviewed. Not in
10
    the context of an anonymous peer review like we've talked
    about earlier. But it is reviewed prior to the
    publication. I mean, a decision is made on Letters to the
13
    Editor, just like they are on manuscripts that are
14
    published, in that there's a decision to accept for
15
    publication or reject or ask for revisions or things of
    that nature.
16
17
           Q
                 Are you relying on Letters to the Editor as
    part of the basis of your opinions in this case?
19
           Α
                Absolutely.
20
           Q
                 Why is that?
21
           Α
                Because many Letters to the Editor contain
22
    useful information and data.
23
           Q The next is a Guerin article, G-u-e-r-i-n.
24
                 Is that a book?
25
               That's a book, yes.
               And are those R.J. Reynolds employees?
26
           Q
```

```
27
               No, they're not.
28
               Philip -- what is that? Are they Philip
           Vail, Christians & Associates (619)544-8344
                                                             121
    Morris?
               No. Those are scientists at the Oak Ridge
    National Laboratory in Oak Ridge, Tennessee.
               And the next is proceedings of APCA again.
                 So would that have the same answers with
    respect to the other APCA articles?
6
           A Yes, it would.
7
8
                All right. And the next -- what is that
           0
9
    journal? Environ- --
                Environment International.
10
                Is that peer-reviewed?
11
           Q
12
           Α
                Yes.
               That's one of the articles that you went back
13
           0
   and reviewed recently?
14
15
          A Yes.
16
               Okay. And the next, Hedge article, is what?
17 Is that the Annual Occupational?
           A That's what I believe that to be, yes.
18
                Is that peer-reviewed?
19
               I don't know.
Is that an article that you are familiar
20
           Α
21
           Q
22 with, as you sit here today?
23
          A I've not reviewed it in some years, so I
24 don't recall anything specific about that publication.
                The next one is -- you did that before.
25
   Environmental -- what is that? Environmental
26
27
    International?
28
               Environment International, yes.
           Vail, Christians & Associates (619)544-8344
                                                             122
1
                Environment International. All right.
                 You said that is peer-reviewed?
3
                Yes.
                Okay. Is that an article that you're
    familiar with, as you sit here today, Holcomb?
6
           Α
                 Yes.
7
                 The next is journal of APCA again.
8
                Is that your understanding of a journal
9
   publication as opposed to the proceedings of the
   conference?
10
                That's correct. They do have a journal.
11
           Α
    This is a journal citation. So this is different from the
12
13
   proceedings that we've talked about earlier.
14
          Q Okay. What is the next journal?
15
               Journal of Colloid and Interface Science.
           A
16
           Q
               Is that peer-reviewed?
17
           Α
                Yes.
18
           Q
               And the next is a book? That's Jenkins. Is
19 that a book?
20
                Yes, it is.
           Α
21
                 And the next is proceedings of APCA again.
22
                 So would that have the same answers with
23 respect to the other APCA?
               With respect to the EPA/APCA conference
25
    proceedings, yes, it would have the same answers.
26
           Q Do you draw any distinction between relying
    on articles that are published in peer-reviewed journals
27
28
    and articles that come from these proceedings of the
           Vail, Christians & Associates (619)544-8344
                                                             123
1
    various conferences?
           Α
              I think you asked me that question earlier.
```

```
Well, I asked you peer-reviewed versus
   nonpeer-reviewed. I'm now sort of asking a slightly
5 different flavor of peer-reviewed versus things that come
6 out of the conferences.
           A Globally, based singularly on that
8 distinction, I would say no. A lot of these
    conferences -- what this particular conference, the
9
    EPA/APCA, or as it was renamed, the AWMA Conference,
10
    during the period of time through the late eighties and
11
12 early nineties was one of the premier forums for
13 disseminating and learning about information and research
                 So this is -- as an example, is a singularly
15
16 good example of a conference that was -- that had very
    useful information. And, in general, these publications
18
   and presentations at that conference were very good and
   very informative.
19
20
              There's a -- I don't know if it's Klus,
           Q
21 K-l-u-s.
22
                Do you see that?
23
           A
               Uh-huh.
             Published in Indoor Environment?
Indoor Environment, right.
           Q
24
25
           Α
               Is that a peer-reviewed journal?
           Q
26
           A Yes, it is.

Q How about the McCarthy article, what is that
27
           A
28
           Vail, Christians & Associates (619)544-8344
1 journal?
                American Review of Respiratory Disorders, I
    believe is that citation.
           Q What year is that from?
5
                I don't know the exact year. If memory
           A
   serves, that's the late eighties. But I don't see it
    here, and I don't recall.
7
               Is that peer-reviewed?
8
           Q
                I don't know.
9
           Α
              Are you familiar with the content of that,
10
          Q
11 other than the title?
          A I remember reading papers certainly with
12
13 McCarthy as the first author. Without seeing it, I
14 couldn't say much more about that, no.
15
               The Muramatsu article at the bottom of the
          Q
    page, what journal is that?
16
17
           A Environmental Research.
               Is that peer-reviewed?
18
           Α
19
               I'm sure that it is, but I can't say for
20 certain.
               On page 5, you see the Nelson article, 1991,
22 published in the Journal of -- what is that? The Journal
    of the American Society of Mass Spectrometry?
23
24
           A Where are we?
25
                Second from the bottom, page 5.
              Right. Journal of the American Society of
26
           Α
27 Mass Spectrometry. I'm not sure if it's of Mass
    Spectrometry or Mass Spectromegists. But it's one of
           Vail, Christians & Associates (619)544-8344
                                                             125
1
    those two.
2
           0
                Okay. Is that peer-reviewed?
           Α
                 Yes.
4
                On page 6, there is an article from you,
5
   Multiple Measures of Personal ETS Exposure, publications
    listed as the Proceedings of Indoor Air Volume I.
                 What is that?
```

```
There's a typo there. That's not a complete
9
   citation. It's Proceedings of Indoor Air, '90 as in --
10 sorry. Indoor '93, as in 1993. That is a conference
11 proceedings published in several volumes.
               Is that the -- is that the same as what we
13 referred to earlier as the International Conference on
    Indoor Air Quality and Climate? Is that what the
14
15
    conference is?
16
           Α
                I believe so, but I'll hedge on that one.
17
    I'm not sure.
18
          Q Okay. Your article in Analytical
    Communication, is that a peer-reviewed journal?
20
                Where is that?
21
                 Yes, it is.
                 What is the first Oldaker publication? It
22
23
    says "Indoor Air Quality and Ventilation." What is that?
         A That's a book. Selper is the publishing
24
25
    company.
               The last Oldaker thing there on page 6, when
    it says "IAQ 92," that's referring to the Indoor Air
27
    Quality Conference, the international conference?
2.8
           Vail, Christians & Associates (619)544-8344
                                                             126
                Well, that's what generally the acronym IAQ
2.
   stands for. Many of these societies and groups abbreviate
3 their names, and that is the official title. So I don't
4 know whether it's misspelled or if indeed it is IAQ 1992.
5 That is the ASHRAE proceedings, it appears to me.
             On page 8, the first Phillips article, what
   is that? The International Archives of Occupational
   Environmental Health?
9
           A
               That's correct.
10
               Okay. Is that peer-reviewed?
           Q
11
           Α
               How about the Phillips article toward the
13 middle of the page entitled, "Assessment by Personal
14 Monitoring of Respirable Suspended Particles." It goes
15
   on. In Indoor Built Environment.
                Do you see that one?
16
17
           A
                Yes, I do.
18
               What is that, Indoor Built Environment?
          A That's a very unusual name. But that is the
19
20 correct name of that journal.
          Q Is that a peer-reviewed journal?
21
               Again, I'm relatively certain that it is, but
22
23
    I'd have to qualify that. I'm not 100-percent sure.
2.4
           Q The next Phillips article, is that
   Scandinavian Journal of Work and Environmental Health? Do
    you see that one?
                The next one is Environment International.
27
           Α
           Q You're right. The next one after that.
28
           Vail, Christians & Associates (619)544-8344
                                                             127
1
           A
                Yes.
2
                Is that peer-reviewed?
           0
               I'm not sure.
3
               The next one after that, the Pierce, from
5 University of California, San Diego, what kind of
6
    publication is that?
7
           A I described that one earlier. That is what,
    if memory serves, appears to have been a status report
8
9
   that would have been -- or that appeared to have been
10 developed by recipients of funding, which, presumably, is
11 the authors, that would have been submitted to the funding
    agency as a progress report of whatever the funding
```

```
activity was or contract research was.
13
           Q Okay. So you said that earlier.
14
15
                 You think that's the one where Gilpin --
16
                That is, yes.
                 -- would be the co-author?
17
           0
18
           Α
                Yes, it is.
                Okay. On page 9, the Proctor article on
19
           0
20
    Indoor and Ambient Air Quality, what is that?
                That's a book. Although, not listed, the
21
           Α
    publisher is also Selper in London.
22
               What is the next R.J. Reynolds Tobacco
23
    Company? What kind of publication is that?
25
                That's a book.
           Α
26
                 And we've talked about the next ones.
27
                 What is that one with Ramsey there?
28
                 It's a journal.
           Α
           Vail, Christians & Associates (619)544-8344
                                                              128
1
                 From where?
                 By the title, I would say Germany, but that
    appears to be a German title, Analytica Chimica. I'm not
    100-percent sure.
 5
           Q
                 Is that peer-reviewed?
                 Again, I'm relatively sure that it is, but
           Α
 7
    I've never published there. So I'm not 100-percent sure.
 8
           Q How about the -- is it Risner?
9
                 Right.
                Risner, '93, Journal of -- what is that?
10
           0
11
    Liquid Chromotography?
               That's correct.
12
           A
13
           0
                 Is that a peer-reviewed?
14
           Α
                Yes.
15
                And the other Risner article is Journal of
           Q
16
    Chrom- -- what is that, Chromotography Science?
17
          A Chromatographic Science.
                Chromatographic Science.
18
           Q
19
                Yes.
           Α
20
           Q
                Is that peer-reviewed?
21
           Α
                 Yes.
22
           0
                On page 10, the Silver article, Chemical
23 Senses, what is that?
           A It's a journal.
25
                Is that a peer review?
               I'm pretty sure that it is, but, again, I'm
26
27
    not 100-percent certain.
28
           Q Is it possible for you to identify for me in
           Vail, Christians & Associates (619)544-8344
                                                              129
1
    this list the articles or publications that have no
    funding at all from the tobacco industry?
                 There are some that I'm sure do not, but
    there are some that I'm sure that there do. There would
    be some that I'm not sure of, and I would have to review
    the documents and check the acknowledgements section and
 7
    see whether they acknowledge support from Reynolds or
 8
    someone else. So I could not do that exhaustively. As I
 9
    said, some are, some aren't. Some, I wouldn't be sure of.
10
                 Well, as we sit here today -- I fully
    appreciate there will be some you just don't know, without
11
    going to check it. But as we sit here now, can we go
    through and have you tell me the ones that you're certain
13
14
    has tobacco funding and the ones you're certain does not
15
   have tobacco funding? And then I'll understand that the
    rest maybe you don't know and we have to check.
17
           Α
               Sure. If you want to do that, we can.
```

```
18
                  I do.
19
                 May I ask you to clarify what you mean by
           Α
    "tobacco funding" before we start.
20
21
           Q I mean that the researchers or authors are
    employees of the tobacco company or that the research is
23
    funded by the tobacco industry in some way.
24
                 Okay. A note to ourselves, this would be
25
    easier if this was numbered.
26
                  The first one, ACGIH, to my knowledge, has no
27
    tobacco funding.
                  The next four where Bohanon is the first
28
           Vail, Christians & Associates (619)544-8344
    author, at least Bohanon, and as I peruse the list, all
 1
    authors are employees of a tobacco company.
                 The next citation with Brunnemann as the
 4
    first author is the American Health Foundation. I'm
 5
    relatively sure that does not have tobacco funding for
    this particular article.
 6
 7
                  The next one, Caka, I am a co-author, but
    there are other co-authors who are university professors
    and graduate students. I don't -- that one may have
 9
10
    funding acknowledged to a tobacco company or the tobacco
11
    industry. I'm not sure.
12
                  Caldwell is -- that's an RJR publication.
13
                  Coggins -- well, all of the authors except
14
    Sagartz are R.J. Reynolds employees. So that's a tobacco
15
    company paper.
16
                  Conner and Oldaker, et al., is tobacco.
17
                 Coultas, I'm sure is not tobacco funded.
18
    Both of those.
19
                  Crouse is.
20
                  Davis is.
21
                  When I say "is," I mean either an employee of
   the tobacco company or would acknowledge funding by the
22
23
    tobacco industry.
24
                  Is that a sufficiently abbreviated way of
25
    doing that?
26
                 Perfect.
           Q
2.7
                  DeBethizy is.
           Α
28
                  The next, Eatough may be. I'm not sure.
           Vail, Christians & Associates (619)544-8344
                                                                131
                  Eudy, E-u-d-y.
1
                  Gilpin, I would say is because it derives
 2.
 3
    from tax money collected by the company's own sale of
 4
    cigarettes.
 5
                  Gori, I'm not sure about.
 6
                  Green is. Both Greens are.
 7
                  I should count these so I can get my verb
 8
   tense correct here.
 9
                  Guerin would acknowledge support from the
10
    Center for Indoor Air Research, which has some tobacco
11
    industry funding.
12
                  Heavner is. Heavners are.
13
                  Hedge, I'm not sure about.
14
                  Holcomb, I'm not sure about.
15
                  Ingebrethsen is. They are employees of
16
    tobacco companies.
17
                 The next Jenkins citation, in fact, the
    next -- all of the Jenkins citations probably acknowledge
18
19
    funding, at least partial funding from the industry.
20
                  Kay is a tobacco scientist.
21
                  Kendal-Reed is not a tobacco scientist, but
22
   the other two authors are.
```

```
23
                  Klus is employed by the tobacco industry.
24
                  Marbury I'm reasonably sure is not.
25
                  Martin is.
26
                  McCarthy I'm reasonably certain is not.
27
                  Moghissi I know is not.
28
                  Muramatsu I'm reasonably certain is employed
            Vail, Christians & Associates (619)544-8344
                                                                 132
    by or at that time was employed or may have received
     funding from Japan tobacco.
 3
                  National Research Council I presume is not.
                  The next -- or the rest of that page, page 5,
 4
 5
    first author Nelson, Dr. Nelson is an employee of R.J.
 6
    Reynolds.
 7
                  The next, Nystrom, those are Reynolds
 8
    scientists.
 9
                  The next seven -- well, \operatorname{six} citations and
    citations to my C.V. have Ogden as the first author. I am
10
11
    an employee of the tobacco industry.
12
                  Oldaker and the rest of page 6 is.
13
                  Continuing on with Oldaker for all of page 7,
14
    those are employees of -- I'm just checking to make sure
    they all either were or are employees of tobacco companies.
15
                  All -- well, page 8 with Phillips as the
16
17
    first author, I'm reasonably sure that all of those
18
    citations acknowledge support from the Center for Indoor
19
    Air Research.
                  Pierce is the same as Gilpin, which is funded
20
    by monies collected by the tobacco companies on the sale
21
22
    of cigarettes in California.
23
                 Pirkle I'm reasonably sure does not
24
    acknowledge any funding.
25
                 Two citations by Proctor. He was, at that
26
    time, a tobacco company scientist.
27
                  Three publications -- or three citations to
28
    R.J. Reynolds Tobacco Company. That is self-explanatory.
            Vail, Christians & Associates (619)544-8344
                                                                 133
 1
                  Ramsey may acknowledge support from R.J.
 2
    Reynolds. I'm not sure.
                  The two letters by Repace, I'm reasonably
 3
 4
    certain there is not funding by the tobacco industry.
 5
                  The next -- rest of the page 9 and the first
    five citations on page 10, first author Risner, is tobacco
 6
 7
    company work.
 8
                  The next two by Rodgman -- during this time,
 9
    Rodgman -- sorry. Let me restate that. The 1962 paper
10
    would have been published by Dr. Rodgman was an employee
11
    of R.J. Reynolds.
12
                  The 1992 publication probably does not have
13
    any funding by R.J. Reynolds. But I'm not sure.
14
                  Silver was funded by the tobacco industry.
15
                  Tang, first author, that work may be
16
    acknowledged as having support from the tobacco industry.
17
                  Thome is a tobacco industry employee.
18
                  The next one, Thompson et al., is not a
19
    tobacco employee. That may acknowledge citation to
20
    funding from the tobacco industry in some way. I'm not
21
    sure.
22
                  Tricker I'm not sure how to characterize.
23
    That probably acknowledges funding by a research
24
    organization in Germany that is funded partially at least
25
    by the tobacco industry.
26
                 Turner, I'm not sure. In fact, out of all
27
    the Turners, I don't know whether -- presumably, they may
```

28 cite support. I'm not sure. Vail, Christians & Associates (619)544-8344 134 The U.S. Department of Health and Human 1 2 Services has no support that I'm aware of. U.S. EPA Exposure Factors Handbook, two citations, has no support from the industry that I'm aware 5 6 Three citations, first author Walker, as supported by the industry. 7 8 The Willers paper, I'm not sure. I have no 9 idea. 10 That's all. Are there any scientists in the field that 11 12 you respect as doing good work on the subject of 13 environmental tobacco smoke that are not employees or 14 financially supported by the tobacco industry? MR. KODSI: I'm going to object to 15 16 "financially supported" as being vague. 17 But you can answer. 18 THE WITNESS: I'm not sure I understand your 19 question. 20 Could I ask you to go after that again. 21 BY MR. HULBURT: 22 Yeah. I'm trying to identify whether there are any scientists that you would acknowledge are doing 23 good work, good science on the subject of environmental tobacco smoke and they are not supported by the tobacco 25 industry. 26 MR. KODSI: Same objection. 27 28 THE WITNESS: There are many authors who Vail, Christians & Associates (619)544-8344 135 have -- at one point in time may have received funding 1 from the tobacco industry who may not have received funding for all of their work or other portions of their work. 5 As I understand your question, it's do any scientists who have never received funding? Is that a fair way of -- I'm trying to put bounds on this. 7 BY MR. HULBURT: 8 9 Let me be specific to environmental tobacco 10 smoke. 11 That they've not received funding for their work in environmental tobacco smoke but that you recognize 12 13 it as good work, good science. 14 Well, I don't want to give a global 15 endorsement to any scientist, because as I told you 16 earlier, I evaluate every manuscript based on the data 17 that are presented and the conclusions drawn therefrom. So while one author or one group of scientists may author 18 19 a particular piece of work that I consider quite good, 20 they might also author something that I consider to be of 21 lesser quality. 22 There are some authors who have published in 23 the area of ETS chemistry and exposures that while they -see, the distinction I'm trying to draw and the problem I'm having is that many of these publications are -included authors from a variety of different institutions 26 27 and including the industry. 28 So while I have published with Dr. Spengler Vail, Christians & Associates (619)544-8344 136 of Harvard University, he has also published on his own. 1 He certainly has expertise in the area. There is some work that I'm familiar with that I would consider good

```
work.
 5
                 Dr. Hammond, I've also published with her.
 6
    She has published some things I agree with. She's
 7
    published some things I disagree with. She has done good
    work, and there's other work that I find questionable.
9
                 The group previously headed by Joan Daisey,
10
    Dr. Joan Daisey, has published some work that I recall as
11
    being very good.
                  I won't -- again, I don't intend that to be a
12
13
    global endorsement. There may be things that any author
    has published that I find either not supported by the data
14
    or that I don't agree with. But there are some areas
    there that certainly her group has published good
16
17
    information on.
18
                 Searching my brain for other names. I may be
19
    missing some obvious ones. I may not. That's all that
    come to mind right off.
20
21
                 MR. KODSI: Counsel, we've been going about
22
   an hour and ten. Whenever -- I don't want to stop you if
    you're in the middle of a line of questioning, but
24
    whenever you reach a good stopping point, if we can take a
25
    break.
26
                 MR. HULBURT: That's fine. We can take a
27
    break now.
28
                 MR. KODSI: Now?
            Vail, Christians & Associates (619)544-8344
                                                                137
                 MR. HULBURT: That's fine.
1
 2.
                  (Recess.)
    BY MR. HULBURT:
 3
                 Exhibit 585 is a page off the R.J. Reynolds
 5
    website. It is the opening page or home page for the
    subject of tobacco issues on the website.
 6
 7
                 That's something you've seen before?
                  (Exhibit 585 was marked for identification.)
9
    BY MR. HULBURT:
10
                 Do you recognize that?
            Q
11
                 Well, it certainly appears to be a copy of
    the RJR website page, entitled "Tobacco Issues." I have
12
    seen the website and been through the pages. I'm
13
14
    accepting your representation that that is correct. It
15
    has a date of 7/11/2000 on it. So I -- it appears that it
16
    is.
                 Is this a page that you had any role in the
17
18
    content?
19
                 I'd have to read it to determine that.
20
                 MR. KODSI: Counsel, do you have additional
21
    copies, or just one for you and the witness?
22
                 MR. HULBURT: I only have one.
23
                 MR. MILES: Could you have copies of the
    other pages that are part of the website? This says it's
24
25
    page 1 of 1, and it's clear that's not the entire
26
    website.
27
    BY MR. HULBURT:
28
                 It's not intended to be the entire website.
           Vail, Christians & Associates (619)544-8344
    The question is -- what this is is the opening page when
1
    you click on "tobacco issues" icon and you get this page.
                 The question right now is did you have any
    role in the content of this page?
 5
                 MR. MILES: I'm not objecting to your
 6
    question. I'm just asking whether you have the other
 7
    pages to attach to this exhibit.
                 MR. HULBURT: I have some other R.J. Reynolds
```

```
website pages. I don't have all the web pages, but the
10 exhibit is complete.
11
                 THE WITNESS: I would say I did not
12 contribute to the text that's on this page. In a couple
13 of pages, it refers to positions on secondhand smoke
14 issues and solutions to public issues involving
    cigarettes. Those do have relevance to ETS in areas that
15
    I've studied. Though, I wouldn't say that I had any input
    in determining the language on this page, it certainly
17
    refers to issues that I would have had input into.
18
19
    BY MR. HULBURT:
20
                 Okay. Fair enough.
21
                 Then as one goes further into the page, you
22
    can get to the page that's entitled "Secondhand Smoke,"
23
    which I'll mark as Exhibit 586.
24
                 (Exhibit 586 was marked for identification.)
25
    BY MR. HULBURT:
26
                Do you recognize this as a page off the R.J.
           Q
27
    Reynolds website?
28
                 MR. HULBURT: Just a second.
           Vail, Christians & Associates (619)544-8344
                                                              139
                 Neil, this is the one page where I have one
1
    extra copy.
3
                 MR. KODSI: Thanks.
                 THE WITNESS: Yes, it appears to be that.
4
    It's a page entitled "Secondhand Smoke," the same date,
6
    BY MR. HULBURT:
7
                Yeah. These were printed off the computer
8
           Q
9
    yesterday.
10
                 Is this a page that you played some role in
11 the content?
12
                I'm hanging up on your choice of words, some
13 role in the content. I would not have sat at my desk and
    drafted this language, but there's certainly information
15
    here where I would have supplied supporting information to
    help whoever wrote this, to develop.
                Can you tell me what role you played in the
17
           Q
18 text of this page?
19
          A I thought I had done that earlier.
20
                Well, you mean earlier this morning?
21
               Right.
           Α
                We talked about the idea that something might
22
           Q
23
    be sent to you and you reviewed it for scientific accuracy?
24
           A Well, I said that I provided some
    definitions. I provided a review of textual content to
    verify its scientific accuracy, make sure it's consistent
26
27
    with the data that we have generated and the other data
28
    that can be used to support such contentions or such
           Vail, Christians & Associates (619)544-8344
                                                              140
    notions.
                 And I appreciated that. I'm just trying to
           0
3
    be as specific as possible now.
                 Looking at the page that deals with
    secondhand smoke on the R.J. Reynolds website. And I want
    to be as specific as you can to tell me what part of this
6
7
    you contributed to in any way.
              I would say all of this, again, with the
8
    caveat that I didn't choose this particular structure of
9
10
    words. But this is all an area that I would have been
involved in reviewing and supplying information on.
           Q The fourth paragraph down on this exhibit
13
    says, "We believe, and common sense dictates, that parents
```

and others should avoid exposing infants and young 14 children to high concentrations of airborne irritants, including tobacco smoke." 16 17 Is that a statement that is consistent with your own opinion? Is that your opinion as well? 18 19 MR. KODSI: Object to the extent that's outside the expertise of this witness. 20 21 But you may answer. THE WITNESS: That is not within my area of 22 23 expertise. I do not have an expert opinion in that area. BY MR. HULBURT: 24 Do you have an opinion as the principal 26 scientist at R.J. Reynolds related to the subject of ETS as to whether this is a statement consistent with your 27 28 opinion, with your beliefs? Vail, Christians & Associates (619)544-8344 MR. KODSI: Let me object just to the extent 1 that mischaracterizes his role at R.J. Reynolds. He is a principal scientist, as he testified, at R.J. Reynolds that studies issues related to ETS. But you may answer. THE WITNESS: I'm not sure I know how to 6 7 answer that question. I mean, I answered it previously, I 8 thought. This is not an area that is in my particular 9 field of expertise. So I'm not sure how I can answer your 10 question. 11 BY MR. HULBURT: Q When you study ETS, are you attempting to 12 study it so as to know whether ETS has harmful health 13 14 effects? 15 When I study it, meaning me as a scientist, 16 no. 17 Do you, in your role, participate in any way -- participate might not be a good way. But participate in or collaborate with or share with those 19 20 scientists that are studying the health effects of ETS at 21 R.J. Reynolds? 22 A I lost your question. Is it do I share --23 maybe you should ask it again. 24 Q Share, participate, collaborate with those 25 that are focused on the health effects. 26 Α Yes. So it's not as if you're totally isolated, 27 Q 28 that you're off doing exposure assessment and other people Vail, Christians & Associates (619)544-8344 1 are off doing health effects and the two of you never have 2. any dealings with each other? That would not be an accurate description? That's true. That would not be an accurate Α 5 description. Q Explain to me the real life relationship, 7 then, between your group or your work and the work that's being done on the health effects related to ETS. 8 9 A It's difficult for me to capture work that 10 might be responsive to your categorization of the health effects of ETS. There are a variety of scientists in the 11 research and development department and the engineering 12 13 department of R.J. Reynolds that have expertise in a 14 variety of areas. 15 We collaborate, as these C.V.s and 16 bibliographies demonstrate, on a variety of issues. My 17 particular field of expertise is analytical chemistry and 18 measuring exposures to ETS.

```
19
                 I have expertise in other areas in terms of
20
    designing and conducting studies to measure exposure. You
21
    know, and some other areas as well.
22
                 But I don't know how to answer your question
    beyond what's demonstrated in the C.V.s. I mean, we've
24
    got people in a variety of disciplines that collaborate on
25
    other projects and a variety of different types of studies
26
    that are in these various bibliographic citations and
27
    C.V.s that are there.
28
                 So, I mean, I can characterize to you what my
           Vail, Christians & Associates (619)544-8344
                                                               143
    expertise is. Beyond that, I'm a little bit stymied as to
    what you're asking me to do.
3
                Do you have an opinion as to whether parents
 4
    and others should avoid exposing infants to environmental
5
    tobacco smoke?
6
                 MR. KODSI: Objection; vague.
7
                 Counsel, do you mean expert opinion, or
8
    personal opinion?
9
                 MR. HULBURT: I'm asking expert opinion.
    BY MR. HULBURT:
10
11
               Do you have an expert opinion on that?
                 I've answered that twice. No, I do not.
12
           Α
               Do you have a personal opinion as a scientist
13
           Q
14
    who spent 15 years studying environmental tobacco smoke?
15
                Yes, I do.
16
           Q
                 What is that?
17
                 My personal opinion is this statement is
           Α
    accurate, and it reflects what I believe, that parents and
18
    others should avoid exposing infants and young children to
20
    high concentrations of any airborne irritants, including
    tobacco smoke.
21
22
           Q
               Why tobacco smoke?
23
           Α
                Why tobacco smoke?
                Right.
24
           Q
25
                I'm a bit lost. It says any airborne -- the
           Α
    statement I just read that I agreed to was warning
26
27
    exposure to high concentrations of any airborne irritants,
28
    including tobacco smoke.
           Vail, Christians & Associates (619)544-8344
                                                               144
1
                 Now, your question, as I understand it, is
    why tobacco smoke?
2.
3
                 Right.
           Q
                 Why should parents avoid exposing infants and
 4
5
    young children to tobacco smoke?
6
                 MR. KODSI: Objection as
7
    mischaracterization. I believe it says "high
8
    concentration of airborne irritants, including tobacco
9
    smoke."
10
                 THE WITNESS: Well, the reference to tobacco
11
    smoke --
12
                 MR. MILES: Hang on a second.
13
                 MR. KODSI: Just to clarify, for the record,
14
   we're still offering a personal opinion and not an expert
15
    opinion?
16
                 THE WITNESS: As I've said, my personal
17
    opinion is that young children should not be exposed to
    airborne irritants, including tobacco smoke. Tobacco
    smoke is the subject of the page. It's the subject of,
20
    you know, the tobacco issues, and that's why it's included
21
   there.
22
    BY MR. HULBURT:
23
           Q
                Right.
```

24 And we're sort of off the page now, and we're 25 talking about your -- is it your personal opinion -- let me clarify the question. 26 27 Is it your opinion that parents and others should avoid exposing infants and young children to 28 Vail, Christians & Associates (619)544-8344 145 tobacco smoke? 1 No. So in your opinion, it's got to include some 3 sense of the concentration of the tobacco smoke? 4 5 A Yes. Do you have an opinion with respect to the 6 7 level of concentration of tobacco smoke that children 8 should not be exposed to? 9 There is not a number that I can put on that to quantify. I mean, this statement says "high 10 concentrations." And, in my mind, my personal opinion is 11 that's meant to reflect that parents -- again, my personal 12 opinion is that parents should not concentrate their 14 smoking activity in the near vicinity of young children. 15 That does not extend to smoking elsewhere in the house, and there may be trace levels or very small quantities of 16 tobacco smoke because all the indoor air and even outdoor 17 18 air contains a variety of chemicals from a multitude of 19 sources that one cannot escape from. 20 I mean, it's a part of everyday living. 21 Just as I would say children shouldn't play 22 on the street corner, you know, near the exhaust pipes of vehicles. I mean, you don't concentrate young children in 23 2.4 areas of close proximity to sources of chemicals. That's 25 a -- as a parent, I would say that's a bad idea. 26 And so, again, let's be specific to tobacco 27 smoke. Why should parents and others avoid smoking 28 Vail, Christians & Associates (619)544-8344 146 near their children? 1 MR. KODSI: Objection; asked and answered. BY MR. HULBURT: 3 4 We didn't get the answer to why yet. I got 5 the response that you believe that's a true statement, but I want to know why. 6 7 I'm apparently missing your question. I'm not sure I understand how to answer that question. Maybe 8 9 I'm missing a point here. 10 Can I ask you to rephrase it, if that's 11 possible? 12 Is it because you believe it would be harmful 13 to the child's health? I believe -- again, my personal opinion, not 15 my expert opinion, I believe that continual exposure of 16 young infants to high concentrations of chemicals from any source, including tobacco smoke, is unwise because there 17 18 may be health effects or irritation effects or other sorts 19 of things that would not be healthy for a young child. 20 Q Were you involved in this sentence on the web 21 page, the sentence that we've been talking about? Certainly not in an expert capacity. And I 22 23 don't recall contributing to it in -- again, not in an expert capacity. But I would have reviewed that sentence, 24 25 and as we've gone into my personal opinions, that's very 26 compatible with my personal opinions. 27 Did you make any suggestions regarding this 28 sentence? Did you participate in editing this sentence

```
Vail, Christians & Associates (619)544-8344
    from some prior version to what it is here? Did you sign
1
    off on this sentence? What role did you have with respect
    to this sentence?
                 MR. KODSI: Objection; compound, and I think
5
    asked and answered as well.
                 THE WITNESS: I don't recall any specific
7
    involvement with this sentence, as it stands, one way or
8
    the other.
9
                 I recall reading the page in its entirety.
    There was not a process by which I signed off on anything,
10
11
    to use your words.
12
                 Had I had an objection, expert, personal, or
13
    professional, I would have raised that. I don't recall
    doing that in this particular instance. So I have no
15
    recollection of raising the issue on this particular point
    or this particular sentence.
16
    BY MR. HULBURT:
17
18
                 What does high concentration mean in this
           Q
    sentence?
19
                High concentration, to me, in this context,
20
    would indicate the concentrations that would be associated
21
    with performing the activity for long periods of time in
22
23
    the near vicinity of the child or the infant, as this says.
                 So, for example, I would not -- I would
24
25
    consider an activity that's compatible with this sentence
    to be smokers smoking in a house would not congregate in
26
27
    the child's bedroom while the child is sleeping and have a
    poker game. I mean, that would be unwise.
2.8
           Vail, Christians & Associates (619)544-8344
                 You would do your smoking in other parts of
1
    the house if that was compatible with your lifestyle.
2.
3
                 So the high concentration would be that that
    resulted from concentrating the activity for long periods
    of time in the near vicinity of the child. Behavior that
    would result in high concentrations.
7
                 So am I correct in understanding that from
           Q
    your perspective, then, what should be avoided is people
8
    should not smoke near their kids?
9
10
                 MR. KODSI: Objection; mischaracterizes prior
11
    testimony.
12
                 THE WITNESS: A large number of smokers and
    for long periods of time, I would say that's true.
13
14
    BY MR. HULBURT:
15
           0
                So if one mother is smoking next to her
16
    child, that's okay?
17
                 MR. KODSI: Objection; vague as to what
18
    "okay" means.
19
                 You can answer.
20
                 THE WITNESS: I don't know how to answer that
21
    question.
22
    BY MR. HULBURT:
23
              Does this sentence mean that a mother should
           0
24
    not smoke next to her baby?
25
           A I don't know how that sentence can be used to
26
    say that in the way that you've proposed it. I think what
    this sentence is meant to portray is that the belief of
27
28
    R.J. Reynolds, which I share, is that parents should not
           Vail, Christians & Associates (619)544-8344
                                                               149
1
    engage in activities that expose their children to
    prolonged high concentrations of any chemicals or other
    irritants.
           Q
                Right. Now, I understand that. And I'm
```

trying to -- I'm trying to pursue that further to know 6 what it means to say "prolonged high concentration." So 7 I'm starting simplest. One person smoking a cigarette next to her baby, is that covered by this sentence, or is that outside 10 this sentence and RJR does not believe that should be avoided and does not believe common sense dictates that 11 should be avoided? 13 MR. KODSI: Objection; argumentative, 14 compound, vague. 15 You may answer. 16 THE WITNESS: The question you asked me, as I 17 heard it, is asking what R.J. Reynolds believes. 18 The questions that I'd been answering were 19 what I had a personal opinion for. 20 And, again, I reiterate this is not an area 21 that I study as an expert. 22 The scenario you've created, a mother smoking 23 a single cigarette in the vicinity of her child, there are many variables that are undescribed in that hypothetical, 25 and it would depend on the scenario. And these are many of the issues that go 26 27 into, you know, dictating what exposure levels would be. 28 So I don't -- I can't answer that hypothetical question Vail, Christians & Associates (619)544-8344 150 because it assumes -- well, it ignores factors that would be relevant. And I don't know how to answer the question. BY MR. HULBURT: Okay. Do you believe that a mother, inside, 4 5 should not smoke next to her baby? 6 MR. KODSI: Objection; cumulative, 7 argumentative. We've been spending about 20 minutes 8 asking Dr. Ogden about his personal opinions in a deposition where he's here as an expert. 9 Use your time as you will. I just want to 10 11 note that for the record. THE WITNESS: I can't answer that question. 12 You've asked me a single cigarette, and I've told you 13 there are factors that would be relevant to that that are 14 15 unspecified here in our example. 16 I can't answer your question as it's asked. I'm sorry. 17 BY MR. HULBURT: 18 Q Is -- well, if that mother that we're talking 19 20 about is smoking a cigarette next to her baby, in the 21 home, would that be an irritant in high concentration? A 22 It could be. 23 Under what setting? 24 Again, you're asking me in a mode that I'm 25 giving you my personal opinion? 26 Q Well, right now, as I understand it, I'm 27 directly on top of where your expertise is, talking about the concentrations of ETS in given environments. 28 Vail, Christians & Associates (619)544-8344 151 Is that true? That is true. But that's not the question 2 3 that you asked me just a moment ago. Q All right. The question right now is, if a 4 5 mother is smoking a cigarette next to her baby, inside in 6 their home, would that be an irritant in high 7 concentration? A I can't give you an expert answer to that question, because that's not what I studied.

```
10
                 You don't study whether it's an irritant?
11
                That's correct.
           Α
12
                Okay. You study whether it's high
           Q
13 concentration?
                I study what the concentration level is.
14
           Α
15
                Okay. Can we agree with each other that
    environmental tobacco smoke is an irritant?
16
17
               To some people at some concentrations, yes.
                 Certainly, that's what's envisioned by this
18
           Q
19
    sentence that we've been talking about?
20
                 MR. KODSI: Objection; speculation.
21
                 THE WITNESS: My personal opinion would be
22
   that that embodies that type of response.
23
    BY MR. HULBURT:
24
           Q Okay. So let's put that aside.
                 If this mother is smoking a cigarette next to
    her baby, in the home, is that in high concentration for
26
27
    the baby?
28
                 MR. KODSI: Objection; incomplete
           Vail, Christians & Associates (619)544-8344
                                                             152
1
    hypothetical.
                 THE WITNESS: That's what I was trying to get
    from you earlier, that there are variables and factors
4
    that would be relevant to determining what the resulting
    concentration would be that are unspecified in your
5
    example. So it may or it may not.
    BY MR. HULBURT:
                 All right. Under what setting would it be?
8
           Q
9
                Well, there would be scenarios in which the
10
    volume of space that the mother and child were occupying
11
    for a single cigarette to be smoked, if the larger the
    volume of space, the lower the concentration would be.
12
13
    The converse of that, of course, is obvious. The smaller
    the space, the higher the concentration would be, as a
15
    single factor.
16
                 The amount of ventilation or fresh air coming
17
    into that space and going out of that space is relevant.
    If it's a room with a window open and there's a reasonable
18
    amount of airflow, that would certainly tend to decrease
19
20
   the concentration. If it was stagnant air, no forced air
21
    movement, no fresh air coming in, that would tend to
22
   increase the concentration.
                 The proximity of the mother, smoking mother,
23
24
    for this example, to the child would also dictate the
25
    concentration. The further away the child was from the
26
    smoker, the lower the concentration would tend to be.
                 So, I mean, those -- there are a variety of
27
    variabilities there, and, of course, there are a number of
           Vail, Christians & Associates (619)544-8344
    combinations to those variables.
1
           Q Well, let's try to put it in some sort of
    presumably real life situation, that they're in a room.
    Let's say it's approximately 12 by 12. That they remain
5
    in that room together the entire time. That the windows
    are closed. There's no air-conditioning or forced air
7
    even on at the time. You tell me what proximity the
    mother would need to be to the baby for the baby to be
8
9
    exposed to a high concentration.
           A There are other variables that you haven't
10
11
    specified here, and one of them is the time frame, the
12
    time period in which they occupy the room and the number
13
    of cigarettes that are smoked in the room.
14
                All right. Well, you tell me -- under the
```

setting of the limited bit that I've given you, you tell me the situation where the baby would be exposed to high concentrations. 17 18 MR. CAFFERTY: Objection; vague and ambiguous 19 as to what you mean by "high concentrations." 20 MR. HULBURT: Well, I agree with that, but we got that term out of this website. So we're using it. 21 THE WITNESS: Well, I would think in the 22 room that you've described, which is 12 by 12, assuming a 23 24 standard ceiling height --BY MR. HULBURT: 25 26 Q 27 -- and a reasonable amount of air exchange Α 28 that would be typical of a house, and a smoker smoking a Vail, Christians & Associates (619)544-8344 1 single cigarette in that room, that would not, in my mind, result in what I would consider a high concentration. It 2. would be measurable by analytical technology that I and 3 others have developed, but I would not consider that high. If 12 smokers were in that room each smoking a single cigarette, yeah, that would be a high concentration. I can't tell you what that number would be. One could devise an experiment and conduct it, and I 9 can measure it. But I can't tell you at this sitting what that hypothetical scenario would result in, but that would 10 11 clearly be high, in my mind. So what are you having in mind when you say "high concentration"? What does that mean to you? 13 A High can be -- is a qualifier that can mean 14 15 many things. Within the context of a single study, you 16 can talk about the two or three or the top few percent of 17 observations in a study that are, by definition, high. Now, that would be a relative term. You know, they're 18 19 high relative to situations observed in that study. 20 In an absolute sense, I can't tell you what 21 high is as it relates to a particular health effect or a particular irritation, because that -- there's not been 22 that much work in that area, in the literature. But 23 that's not an area of expertise that I hold out. That's 24 25 not what I do. I can measure the level and tell you what it is, but it's really for others to tell you in a 27 particular context whether that's high. 28 In the context of a range of measurements and Vail, Christians & Associates (619)544-8344 155 1 what's typical in a home, given a particular number for 2. the concentration of an ETS constituent, I can tell you whether or not that's high relative to homes or workplaces. 3 But high in an absolute sense, I cannot give 5 you an answer to that. I don't know. 6 Q Do you know whether it would be harmful to 7 the baby for this mother to be smoking the cigarette in 8 the room, as we've described? 9 MR. KODSI: Objection. I think that's been 10 asked and answered about four times. 11 But you can try again. 12 THE WITNESS: It's beyond my area of expertise. I have no expert opinion as to whether that 13 14 would be harmful to the baby or not, in your hypothetical. 15 BY MR. HULBURT: 16 Q The next paragraph says, "Despite the 17 conclusion by a variety of public health organizations and government bodies, we do not believe that the scientific evidence concerning secondhand smoke establishes it as a 19

risk factor for lung cancer, heart disease or any other disease in adult nonsmokers." 22 Did you play any role in that sentence? 23 Α 24 Q In what way? 25 The foundation or the support for the Α 26 sentence that you read would derive in some respects from 27 work that I have conducted on measuring exposures, looking at exposures that are in the population and people that Vail, Christians & Associates (619)544-8344 156 live in the United States. It would encompass research 1 that I have done that would be relevant to understanding the epidemiology studies that other people have done. It would be relevant to understanding whether the surrogates 5 for exposure that have been used in other studies are 6 valid or reliable. 7 So there is research that I have conducted 8 that certainly would be used to support this statement 9 that is listed here as Reynolds' position. 10 Q Is this sentence consistent with your opinion as well, as an expert witness in this case? 11 12 A I'm going to have to read it again to 13 myself --14 Go ahead. Q -- to make sure I don't overstep my bounds of 15 16 what I consider my expertise to be. MR. KODSI: And I'm going to object to the 17 term "consistent" to the extent that's vague and 18 19 overbroad. 20 THE WITNESS: The particular sentence that 21 we're referring to talks about the evidence that either 22 establishes or does not establish secondhand smoke as a 23 risk factor for disease. As it's stated, that is not an area of expertise that I hold out. 25 What I do is a component of understanding how 26 other people have derived their conclusions. 27 But on its face, that statement is more global than I am prepared to address as an expert. 28 Vail, Christians & Associates (619)544-8344 157 1 BY MR. HULBURT: You don't have an opinion whether ETS or Q 3 secondhand smoke is a risk factor for anything --MR. KODSI: Objection --4 BY MR. HULBURT: 5 6 -- as an expert; is that right? 7 As an expert, I know from my own studies that 8 a number of assumptions that people have used in the 9 derivation of their risk assessments, I believe they are 10 not accurate. 11 So from my expertise, I would say that there 12 are flaws in certain risk assessments that have been done 13 that other people have used to say that there is a risk 14 factor. 15 I would say based on what I know in my expertise, there is certainly reason to say, wait a 17 minute. I'm not sure that's been done scientifically 18 accurately. So I do have, within my field of expertise, 19 reasons to believe that the supporting data that others 21 have used in risk assessments is not necessarily the 22 correct data or the most accurate data. 23 So did you have an opinion as to whether 24 secondhand smoke is a risk factor for anything?

```
25
                 Are you asking me my expert opinion?
26
                 I am.
            0
27
                 I cannot give you an answer to that question
           Α
28
    because that encompasses more than my area of expertise,
           Vail, Christians & Associates (619)544-8344
1
    and I can't give you a global answer to that question, as
     an expert opinion.
                 Okay. So you're prepared to, in some
           Q
    instances, criticize the technique or conclusions of
 4
    others who have drawn the connection between secondhand
 5
    smoke and risk factor for disease, but you have no opinion
 6
    yourself as to whether there is a connection between
    secondhand smoke and a risk factor for disease?
 8
                 MR. KODSI: Objection to the extent that
 9
    mischaracterizes what he said.
10
11
                 THE WITNESS: I certainly am in a position
12
    and I have done -- in comments, in publications, and
    citations we've talked about earlier, I have reviewed
13
    various aspects of risk assessments. And from my own work
    have criticized the findings of others based on inaccurate
15
16
    or nonrepresentative or simply the use of manufactured
17
    information.
18
                 In other words, there are certain variables
    and risk assessments for which we don't have any data.
19
20
    And some agencies and people choose just to make up
21
    numbers for input into these various calculations.
                 In my research, myself and others, we have
    gone out and made certain measurements that I believe
23
    should be taken into consideration.
24
25
                 So to the extent that a risk assessment done
26
    by anybody or any agency is critically dependent on any of
    the variables that I have studied as an expert and to the
27
     extent that our data are correct and their data are
28
           Vail, Christians & Associates (619)544-8344
    incorrect, to me, that would tend to invalidate the risk
1
    assessment, yes.
    BY MR. HULBURT:
           0
                 Do you have an opinion as to whether
 5
    secondhand smoke is a risk factor for disease in juvenile
 6
    nonsmokers?
 7
                 MR. KODSI: Objection; outside the scope of
 8
    his expertise, vague, overbroad.
                 THE WITNESS: The study of risk association
 9
    and risk assessments is not in my field as an analytical
10
11
    chemist. And that's what I do. So, no, I do not have an
12
    expert opinion in that area.
13
    BY MR. HULBURT:
14
                 Do you know what the position of R.J.
    Reynolds is with respect to whether secondhand smoke is a
15
    risk factor for juvenile nonsmokers?
16
                 Your question -- before I even try to answer
17
18
    it, it is incomplete. You say "a risk factor." That
19
    implies a risk factor for something.
20
           Q
                 For disease?
21
                 For any disease?
22
                 Do you know whether -- do you know what the
    position of R.J. Reynolds is with respect to whether
23
    secondhand smoke is a risk factor for disease in juvenile
24
25
    nonsmokers?
           A
26
                 I do not have an expert opinion there, but I
27
    do have a personal opinion there that I can offer.
28
                Well, do you know the position of the company
           Vail, Christians & Associates (619)544-8344
                                                               160
```

```
on that issue?
 2
           A I believe that I do, yes.
 3
           Q
                 What is it?
                 Realizing this is outside my area of
    expertise, but my representation or my understanding of
 5
 6
    the company's position is that based on the science that
 7
     exposure to environmental tobacco smoke has not been
 8
     established as a risk factor for any disease in any
9
    population.
10
                 Do you know why the website here, talking
            Q
    about secondhand smoke, doesn't say that? Why this
11
    distinction where this sentence is limited to adult
    nonsmokers as opposed to all nonsmokers?
13
14
                 MR. KODSI: Objection; calls for speculation.
    BY MR. HULBURT:
15
16
                I don't want you to speculate. I'm asking
17
    you because of your role being involved in this page.
18
                 Do you know what went into the thought
19
    process behind limiting that to adult nonsmokers rather
20
    than all nonsmokers?
21
                 No, I don't.
           Α
22
                 Did you participate in any meetings,
23
    conversations, communication regarding that distinction?
24
           A No, I did not.
25
            Q
                 Do you have any information as to who drew
26
    that distinction?
27
           Α
                 No, I really don't.
                 So if it's not a risk factor for any disease
28
           Vail, Christians & Associates (619)544-8344
                                                                161
     in any population, why should we avoid exposing infants
 2
    and children to it?
 3
                 MR. KODSI: Objection; argumentative, outside
 4
     the scope of his expertise.
 5
                 MR. MILES: Also misstates his testimony, if
 6
    I can jump in.
 7
                 THE WITNESS: Many things -- and this is back
    to my personal opinion -- I think come from what you would
 8
    consider common sense. And as a parent, it does not make
9
    good sense to expose children to higher concentrations of
10
11
    anything.
12
                 And I think this is an acknowledgment of
13
    simply a common sensical concept, that it's just not a
14
    good idea to do it.
15
    BY MR. HULBURT:
16
           0
                Even though there's no known health
17
    consequences?
18
                 The question you were asking me earlier was
           Α
19
    about risk factor, and now we've jumped to health
    consequences. I'm not sure -- that's beyond my area of
20
21
    expertise, and I'm not sure whether there's a distinction
22
    there or not.
23
                  As a personal opinion, I would say that
24
    tobacco smoke exposure, ETS exposure can be annoying. If
25
    you consider that a health consequence, then we'd say,
26
    yeah, some people are annoyed at some concentration of
27
    exposure to ETS. And that can be avoided. I mean, that's
    an acknowledgment of that concept.
28
           Vail, Christians & Associates (619)544-8344
                                                                162
 1
                 Whether or not you or I consider that a
 2
    health consequence, I don't know if we're using the same
 3
    terminology here.
           Q
                 I would not use that as a health consequence.
           Α
                 Okay.
```

```
6
                 Are there -- are you a smoker?
           0
7
           Α
                 No, I'm not.
8
           Q
                 Have you ever been a smoker?
9
           Α
                 Not a regular smoker. I've smoked a few
    cigarettes in my life.
10
11
           0
                Never around your kids?
12
                 I don't think I've ever even smoked one at
           Α
13
    home, no.
14
           0
                 Is your wife a smoker?
15
           Α
                 No, she is not.
16
                 Was she ever a smoker?
           Q
17
           Α
18
                 How about any of your kids, are they smokers?
           Q
19
           Α
20
           Q
                 I don't know how old your kids are. So I
21
    don't know how relevant that question is.
22
                 Do you know how long it has been the belief
23
    of R.J. Reynolds, this belief that's in paragraph 4 of
    Exhibit 586, common sense, parents and others should avoid
25
    exposing infants and young children?
26
                 MR. KODSI: Objection to the extent it calls
27
    for speculation.
28
                 THE WITNESS: I don't know how long it has
           Vail, Christians & Associates (619)544-8344
                                                               163
1
    been since Reynolds has -- as a company, has made such a
    statement. I have been in conversations with other
    scientists in R.J. Reynolds who have expressed that
    opinion for more than ten years.
    BY MR. HULBURT:
5
6
           Q When was -- when was this page of the website
7
    first put up for public view? I know we could get into
8
    maybe it's been changed and maybe something has been
9
    tweaked. But I'm really interested in when did it first
10
    get up?
                 I can't answer that. I don't know.
11
           Α
12
                Can you give me your best estimate? When
13
    were you first involved in this page of the website, the
14
    secondhand smoke page?
15
          A
                 I would say the last year or two, but I can't
16
    be sure of that. I simply don't recall.
17
                Let me show you what I'll mark as
18
    Exhibit 587, which is the page from the website entitled
    "Corporate Responsibility: Marketing."
19
                 (Exhibit 587 was marked for identification.)
20
21
    BY MR. HULBURT:
22
           Q Is that a page you've reviewed as well?
23
                 I have read this page, yes.
           Α
24
                The first paragraph of that page talks about
25
    some exposure. I want to ask you if you had any role in
26
    that paragraph.
27
                 Well, the sentence that I'm reading that's
28
    related to exposure to secondhand smoke, as I read it, is
           Vail, Christians & Associates (619)544-8344
                                                               164
1
    simply a rephrasing of the same sentence or the same
    concept that was included on the other page. So my
    answers to that would apply here as well.
                You're looking at the sentence that says, "We
5
    believe that children should not be exposed to secondhand
6
    cigarette smoke or any other airborne irritant"?
7
                That's the sentence I'm referring to, yes.
8
                 Now, here, there's no mention of high
           Q
9
    concentration.
10
                 So I want to ask you whether this statement
```

on behalf of R.J. Reynolds, that children should not be 12 exposed to any secondhand smoke? 13 MR. KODSI: Objection; outside the scope of 14 this witness' expertise. THE WITNESS: Anybody that reads this can see 15 16 that it is not qualified in the same way. My personal 17 opinion is that it is intended to be a restatement of the same concept found over there. A different choice of words. Over there, meaning on the previous page we 19 20 discussed, on secondhand smoke. 21 My personal opinion is that this statement is 22 not exactly accurate. 23 BY MR. HULBURT: 24 It goes too far? Q 25 I believe so. I believe this statement on 26 the previous page on secondhand smoke is more correct, but that's my personal opinion. And I'm not speaking on 27 28 behalf of the company or as an expert on that. Vail, Christians & Associates (619)544-8344 1 Do you know why this sentence says what it says, given whatever your involvement was in the web page? A No. I have no knowledge of that. Did you provide any comment regarding this 5 sentence to say that it goes too far or we don't need to 6 say that or it's not entirely accurate? 7 A I recall making no specific comment on that 8 sentence. 9 Have you participated -- in the course of your work at R.J. Reynolds, have you participated in any 10 efforts to reduce whatever risks there are associated with 12 secondhand smoke? 13 MR. KODSI: Objection; argumentative, lack of 14 foundation. THE WITNESS: I've participated in efforts to 15 reduce the concentrations of ETS in a variety of 16 17 environments. BY MR. HULBURT: 18 19 In what way? 20 Participated in engineering types of studies 21 that look at the effect of ventilation and air management and air filtration. 23 I've participated in development aspects of developing technology, air cleaner technology. 24 25 I've participated in actual field studies where we have gone into restaurants, particularly, and 26 27 maybe other environments, to actually improve the 28 engineering solutions that were available to the business Vail, Christians & Associates (619)544-8344 166 1 owners. I've participated in the development of products, of cigarette products, tobacco products that have reduced ETS emissions. 5 Those are some examples that come to mind 6 right off. 7 Have any of those projects that you've just 8 described been in any way motivated by the desire to produce health effects from secondhand smoke, or the 9 10 annoyance from secondhand smoke? MR. KODSI: Objection; lack of foundation, 11 12 incomplete hypothetical, argumentative. 13 MR. CAFFERTY: Vague. 14 THE WITNESS: I can't answer the question any 15 better than I just did. The area input that I had into

these studies, many of these studies that I and others have done was for the purpose of reducing the 17 concentrations of ETS. That is my input into it, and that 19 is my responsibility in these types of studies, is to document the reduction, if you will, or document the 21 levels of reduction. So that is my expert role in those types of studies. 22 23 BY MR. HULBURT: Yeah. But why? Why were there these studies 24 Q ongoing, trying to figure out ways to reduce the 25 concentrations of ETS? 26 27 MR. KODSI: Objection to the extent it calls 28 for speculation. Vail, Christians & Associates (619)544-8344 167 You may answer, if you know. 1 THE WITNESS: There are a number of reasons that dictate why we would be involved in some of these 3 types of studies. In terms of product development efforts, the issue of reducing ETS concentrations or secondhand smoke exposure is an area that is important to 7 our customers. So as a consumer product company, we reply to the and respond to the wishes of our customers. 9 There are other individuals and business 10 owners that have asked us for assistance, presumably 11 because it's an area of concern to them and their customers. Like, for example, in a restaurant or a bar, to help them design a space that would accommodate smokers and also reduce the concentrations of ETS to which their 14 nonsmoking patrons would be exposed. 15 We recognize -- I recognize that there is a 17 public awareness of environmental tobacco smoke or secondhand smoke exposures and to respond to people's 18 19 wishes. 20 I mean, we -- and also to understand our products, we engage in this type of research. 21 22 BY MR. HULBURT: Is any of that motivated by a concern of the 23 Q potential health effects on the nonsmoker? 24 MR. KODSI: Objection; asked and answered. 25 26 It's also vague with respect to what the concern is. 27 But you may answer. THE WITNESS: Well, as I indicated in my 28 Vail, Christians & Associates (619)544-8344 168 previous answer, and as indicated in this website, Reynolds is aware that many people find secondhand smoke 3 annoying. We are aware that there have been risk 4 assessments and public policy proclamations that impact smoking in indoor environments and even outdoor environments. We are aware that these risk assessments 7 have been done. We've investigated or done research that are relevant to some of those risk assessments, my 9 particular expertise being in chemistry and exposure 10 assessments. 11 So there is an awareness -- we certainly have an awareness that there is -- there are allegations that have been made. And, as scientists, we're trying to help 13 understand the strength or weakness of those allegations, 14 15 whether or not there potentially is or is not health 16 effects. 17 I mean, as a company, that's what we're 18 trying to do, and my role in that is exposure and 19 chemistry and other aspects as I've described them, on the 20 risk assessments and understanding whether or not there is

```
a scientifically verifiable risk.
    BY MR. HULBURT:
                 So is that, yes, that part of the motivation
23
    for these studies has been an effort to see if you can
    reduce the potential health effects to the nonsmoker?
26
                 MR. KODSI: Objection; mischaracterizes prior
    testimony, argumentative.
27
                 THE WITNESS: No. The answer is not "yes."
28
           Vail, Christians & Associates (619)544-8344
                                                               169
    The answer is as I gave it just a moment ago.
1
                 MR. HULBURT: Let me show you what I'll mark
 2.
    as Exhibit 588, which is a page from the website regarding
 3
    tobacco-specific nitrosamines.
 5
                 (Exhibit 588 was marked for identification.)
    BY MR. HULBURT:
 6
 7
           Q
                 Is this a page that you had some role in?
 8
                 I may have read this page just in perusing
           Α
9
    the website, but I don't recall any involvement in
10
    developing this page, no.
11
                Is it your opinion that tobacco-specific
12
    nitrosamines are among the most potent carcinogens in
13
    cigarette smoke?
                 MR. KODSI: Objection; outside the scope of
14
15
    this witness's expertise.
                 THE WITNESS: The study of carcinogenicity,
16
17
    again, is not a field of endeavor of an analytical
18
    chemist. So my expert opinion on this is I don't know.
    BY MR. HULBURT:
19
                Have you studied the -- whether
20
21
    tobacco-specific nitrosamines are constituents of ETS?
22
          A We have some ongoing research in that area,
23
    yes.
24
                Have you published -- has R.J. Reynolds
    published on that subject?
           A Not in ETS, no. We have published on
26
27
    mainstream smoke and sidestream smoke, but right now, we
    don't have a methodology that's able to measure
           Vail, Christians & Associates (619)544-8344
                                                               170
    nitrosamines in ETS, and we have no data to publish.
1
 2
              Nitrosamines are present in sidestream smoke?
 3
                Some nitrosamines are present in sidestream
           Α
 4
    smoke, yes.
                 In higher, or lower concentration than
 5
           Q
 6
    mainstream smoke, or the same?
                 Before I can answer your question, I need to
 7
 8
    make sure that I'm using -- let me tell you how -- I'll
 9
    answer the question and tell you how I'll answer that.
    Sidestream smoke and mainstream smoke, as they are studied
    in the laboratory, are laboratory measurements, and they
12
    are constrained by the techniques that are used to measure
13
    them.
14
                  So as you've asked me that question, the
15
   answer is that the concentrations in sidestream smoke
16
    would be lower than in mainstream smoke.
17
                 In the studies that have been done?
18
                Yes. The concentrations in the smoke
    streams -- and concentration, of course, in this area is
19
20
    within my expertise in terms of micrograms per cubic meter
    or some other measure of concentration of an analyte in a
    given air volume. Then my answer is that the
    concentrations in sidestream smoke would be less than that
23
24
    in mainstream smoke.
25
                Do you have any data with respect to
           Q
```

```
26
    cigarette equivalents for nitrosamines in sidestream
27
    smoke?
28
                 MR. KODSI: Objection; vague, overbroad.
           Vail, Christians & Associates (619)544-8344
                                                               171
                 THE WITNESS: Is your question do I have any
2.
    information that Reynolds has developed or --
    BY MR. HULBURT:
                 No. That you know of as an expert in this
    area that you -- that you think is real science, valid
5
    data, that tells us something about nitrosamines in the
6
7
    terminology of cigarette equivalents in sidestream smoke.
8
                 MR. KODSI: Same objection.
9
                 THE WITNESS: I'm not aware of anyone who has
10
    attempted to put concentrations of nitrosamines in
    sidestream smoke into perspective by using cigarette
12
    equivalents.
    BY MR. HULBURT:
13
14
                How about nitrosamines in ETS?
           0
15
                 I am aware of some efforts by some people to
16
   try to derive cigarette equivalents exposure numbers for
17
    ETS that are based on nitrosamines.
                 Has R.J. Reynolds done any of that work?
18
19
                 No, not to my knowledge.
           Α
20
           Q
                 Why not?
21
                Because what is required for an accurate
           Α
22 cigarette equivalent calculation, the data input that are
   required to make that calculation, they do not exist for
24 nitrosamines.
25
                 Is that something that R.J. Reynolds could
26
    develop the data if it chose to?
27
           A We're trying to, now.
28
                 Is that a project that you're involved in
           Vail, Christians & Associates (619)544-8344
                                                               172
    right now?
                 That is an area of research that we have
2.
           Α
    conducted in my research group.
                 Let me rephrase or maybe recharacterize the
5
    answer.
6
                 We are attempting to measure concentrations
7
    of nitrosamines in ETS. Not for the express purpose of
    expressing them in terms in cigarette equivalents. And
9
    that may have been unclear.
                 But we are attempting -- we have some
10
11
    research ongoing that is attempting to make those
    measurements of concentrations. That has turned out to be
13
    an extremely difficult task and one for which we have not
    been successful to date.
14
15
               How long have you been working on that? You
           Q
16
   being R.J. Reynolds. How long has that sort of work been
17
    under way?
18
           Α
                 For looking for nitrosamines in ETS?
19
           0
                 Yes.
20
           Α
                 I would say about three years.
21
           Q
                 Do you --
22
                 Wait a minute. Let me restate that.
23
                 There were some attempts that we made earlier
    that would span more than ten years in which we attempted
24
    to measure ETS nitrosamines. This would date into the
25
    late eighties, and we were not successful at that point in
26
27
   time. And we deemed that the analytical technology did
28 not exist then to warrant pursuit of that.
           Vail, Christians & Associates (619)544-8344
                                                               173
1
                 The reason we -- so there were a number of
```

years between the late eighties and the mid-nineties in which we did not pursue that. But we believed a few years ago that there 5 had been significant advances in analytical technology that might -- that appeared to make it worthwhile to make 6 7 an attempt again. 8 Do you have an opinion as to what are the Q 9 most hazardous constituents of ETS? MR. KODSI: Objection; outside the scope of 10 11 this witness' expertise. 12 MR. CAFFERTY: Objection; assumes facts not 13 in evidence. THE WITNESS: I do not have an expert opinion 14 15 in that area, no. 16 BY MR. HULBURT: Have you had any conversations with any of 17 the other scientists at R.J. Reynolds regarding that 18 19 subject? 20 I've been involved in numerous conversations 21 with other chemists regarding what is the composition of 22 ETS. In terms of chemicals that are present or not present, that have been measured or that have not been 23 24 measured. 25 The discussion around the properties of 26 those chemicals in the way that you asked the question, 27 though, generally, that would not be the topic of 28 conversation. It would be related to, you know, what the Vail, Christians & Associates (619)544-8344 174 chemist is able to determine and not a toxic or a 1 carcinogenic property that would not be in the area of 3 expertise of an analytic chemist to ascertain. Q In the areas -- in the studies that you do, 4 5 trying to measure the concentrations of ETS, frequently, you use some marker as the substitute or as the indicator 7 of ETS concentration; is that correct? MR. KODSI: Objection; vague and overbroad. 8 THE WITNESS: I'm not sure how to exactly 9 answer that question. Let me try. 10 We have studied the appropriateness of a 11 12 variety of chemical constituents of ETS for their 13 suitability in being a marker for ETS as a whole. 14 In general, what we do when we try to assess concentrations or exposures of ETS is that we measure 15 16 multiple chemicals, multiple constituents, and we have 17 used the phraseology multiple markers. 18 So I guess, broadly speaking, the answer to your question is, yes, we've studied markers. We've 19 20 studied more than one. Generally, that's our preferred approach, to study more than one marker. And a lot of our 21 22 research has gone in to trying to ascertain which of these 23 potential markers are better than or worse than others. 24 BY MR. HULBURT: 25 What makes it better than or worse than? Q 26 There are a variety of constituents that 27 would make up the attributes of a good marker. Those are 28 best summarized by the National Research Council, and they Vail, Christians & Associates (619)544-8344 have four attributes of a good marker. And I, as an 1 expert, agreed with those. So there are certain 3 properties that we're looking for. 4 These include things like the ability to measure its reliability in air, even at low smoking rates. That's one of the problems, for example, with the

nitrosamines. It absolutely fails that criteria, right 8 off the bat. 9 There are other criteria of a good marker 10 that include the similar emission rates from a variety of tobacco products. We have studied that. We published on 11 12 that for a variety of markers. There are -- another criteria, for example, 13 is that the markers stay in a constant relationship, as 14 the NRC worded it, to the agent of concern or the class of 15 16 compounds that are concern. And, of course, as an analytical chemist and even as the NRC wrote that, they 17 18 had no idea what that might be. 19 So there is a lot of research that we have 20 conducted, trying to determine the relationship between 21 certain markers and other markers and ETS as a whole. 22 So these are the things that have gone in 23 trying to determine -- some of the things, I should say, 24 that have gone in to trying to determine the validity of a 25 particular chemical as a marker for ETS. And we have 26 published widely on that subject. 27 Do you agree that in California, approximately 4 million -- strike that. 28 Vail, Christians & Associates (619)544-8344 176 1 Do you agree in California, cigarettes smoked 2. in private residences cause a daily ETS exposure to approximately 3 million nonsmoking Californians, including more than 1 million adolescents and children? MR. KODSI: Objection; vague, ambiguous, lack 5 6 of foundation. 7 THE WITNESS: I have no knowledge of that 8 type of data. I don't know whether that's true or not. 9 BY MR. HULBURT: 10 Q Do you have any data on that -- on that 11 subject? I'm sorry. On which subject? 12 Α 13 On the subject of the number of nonsmoking people in California who are exposed to cigarette smoke in the home -- the number of children who are exposed to 15 cigarette smoke in the home in California. 16 17 There are two papers that we've talked about earlier that had Gilpin as a co-author that have information embedded in them that is relevant to that 19 topic, but I don't believe they provide any of the numbers 20 that would be directly responsive to your question. There 21 22 would be factors and relevant information there. 2.3 That would be the only information that I've 24 reviewed that would be even close to being on topic to the 25 question you asked me. 26 Do you agree that ETS contains at least 48 specific chemical species that are regulated as 27 28 carcinogens? Vail, Christians & Associates (619)544-8344 177 MR. KODSI: Objection; lack of foundation, 1 outside the scope of this witness' expertise. THE WITNESS: Whether or not a chemical has been designated as a carcinogen or whatever word you used, 5 that is not something that I memorize or carry around with 6 7 So I have -- while I have knowledge of what 8 chemicals have been measured in ETS and what chemicals we, 9 ourselves, and R.J. Reynolds have made in ETS, I would not 10 be able to align those with any attributes that any other persons may have associated with those chemicals. 11

12 So in direct response to your question, I would say I can answer about chemicals in ETS, but 13 categorized in the way you did, I would have to say that's 14 15 beyond my area of expertise. BY MR. HULBURT: 16 17 0 Let me show you a copy of the Declaration of William Nazaroff, in Support of Plaintiffs' motion for 18 19 Preliminary Injunction. And I want to ask you to turn to page 25, Table 4. 20 MR. KODSI: If you're about to start a new 21 22 line of questioning, would now be a good time for a break 23 since we've gone an hour and five? 24 MR. HULBURT: Actually, I'm on the same line. Let me just do this, and then we'll take a break. 25 26 This directly follows the last answer. 27 THE WITNESS: Okay. What page? 28 BY MR. HULBURT: Vail, Christians & Associates (619)544-8344 178 1 Page 25. 2 Α Okay. 3 If you would just look at this table of Q chemicals, it's got the heading "Chemical constituents of tobacco smoke." And it goes on to page 26 as well. 5 6 And my first question is going to be do you agree that these are all chemicals -- chemical 7 8 constituents of tobacco smoke? MR. KODSI: Objection; vaque. 9 When you say "tobacco smoke," do you mean 10 mainstream tobacco smoke, sidestream, ETS, or all three? 11 BY MR. HULBURT: 13 Q Well, if it makes a difference, I mean ETS. 14 I don't know if it makes a difference or not. 15 A It does make a difference. All right. Do you agree that these are all 17 chemical constituents of ETS? 18 A Let me take a moment to review the list. 19 Yeah. Okay. I've reviewed the names in this 20 Α 21 table. At this sitting, no, I'm not prepared to 22 acknowledge that all of these chemicals exist in 23 environmental tobacco smoke. 24 Are there some that you're of the opinion do 25 not exist in ETS? A There are many for which there are no data. 26 27 So, as a scientist, I mean, I can -- I can approach this 2.8 one of two ways. I mean, the way I prefer to approach it Vail, Christians & Associates (619)544-8344 179 is if it has not been measured, I can't say whether it is there or not. So in the absence of verification of its presence, I don't know the answer to your question or I'd have to say I don't know whether it's there or not. There are some of these constituents that have been measured in ETS. There are some of them that 6 7 have not been measured in ETS. There are some of them 8 that I'm not sure exist even in mainstream tobacco smoke. 9 Let me ask that question, then. Do you agree that all the chemicals listed 10 11 here in this table are chemical constituents of tobacco smoke, mainstream tobacco smoke? 12 13 A No, I'm not prepared to agree with that. 14 Q Which ones would you take off the list as not 15 being chemical constituents of tobacco smoke? 16 Your statement there, I see, is inconsistent

17 with my answer. I'm not prepared to say that some of 18 these are not in mainstream tobacco smoke. I'm just simply not prepared to say that some of them are. My 19 20 recollection is not clear on some of these chemical names. One of these nitrosamines, for example, 21 22 taking a slight different example, the triethylamine, which is at the top of the page, if memory serves, that 23 24 chemical does not exist in mainstream tobacco smoke. It may have 20 or 30 years ago. 25 26 Some of these constituents are 27 questionable. For example, DDT strikes me as questionable as to whether that's in tobacco smoke or not, today. Vail, Christians & Associates (619)544-8344 180 There has been in the literature that I'm broadly aware of, although, my expertise I would say does not extend to an exhaustive listing of chemicals in mainstream smoke. Although, I have knowledge of many of them. I am aware of 4 some debate in the scientific literature as to whether or 5 not some of these other chemicals may truly be in tobacco smoke or not because they -- many of these chemicals are 7 found at such low levels that they are potential artifacts and measurement errors that could have gone into that. 9 So at this sitting, I'm not able to tell you 10 11 affirmatively whether or not all of these chemicals are present. There are some that I recognize are in -- I'm 12 13 sorry. Are in tobacco smoke. And some that I would question. And some that I'm simply not sure. Let me do this, then. 15 Q 16 Can you tell me which of the chemicals are in 17 ETS? 18 I will answer your question in the context of Α 19 ones that I know are in ETS because I am aware that 20 somebody has made a reliable measurement of that chemical. That would include acetaldehyde, aniline, 21 22 benzene, benzopyrene, 1,3-butadiene, cadmium, I believe, has been measured in ETS. Although, we have not made that 23 measurement. Carbon monoxide, formaldehyde, nicotine, n-nitrosodimethylamine, n-nitrosonornicotine, toluene. So 25 that's the end of my listing, and those are ones that I am 26 27 confident have been measured in ETS. There are others 28 that I'm not sure of. Vail, Christians & Associates (619)544-8344 181 Are there chemicals on this list that you 1 would be confident in testifying are not constituents of 3 4 The question that you've asked me is a Α 5 scientific impossibility. You've asked me to prove a negative, and I can't do that. I can tell you that there are many of these 7 8 chemicals that unequivocally have not been measured in 9 ETS. I will not go so far, because science does not allow me to go so far, as to equate that to the proof that 10 they're not there. But in the absence of confirmation, 11 12 that's simply all I can say, is that I don't know whether 13 they're there or not, as a scientist, if nobody has 14 measured them. Is that your answer with respect to all of 15 the chemicals that you did not identify as being known to 16 be in ETS? Obviously, what I'm trying to do now is 17 18 short-circuit the list. But you told me the chemicals 19 that you're willing to say are constituents of ETS. 20 Does that mean that the chemicals that you 21 did not identify, you have no scientific data that

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22
    demonstrates to you that they are constituents of ETS,
23
    because nobody has -- because it hasn't been proven?
                 MR. KODSI: Objection; compound,
24
25
    argumentative.
                 THE WITNESS: Well, no, I'm not able to
26
27
    delineate that list quite so cleanly because there are
    some of these other chemicals -- most of the names, I
28
           Vail, Christians & Associates (619)544-8344
                                                               182
    recognize. And for me to sit here and to properly
1
2.
    categorize the context in which I've read about them or
    heard about them, I'm not able to do that. My memory is
    not that perfect.
                 It would require some -- reviewing some of
5
6
    the information in the documents that are in this list for
7
    me to refresh my memory on some of these.
                 For example, arsenic, I mean, I know that
8
9
    arsenic has been measured in indoor air. Whether or not
10
   that's been attributed to ETS, I don't recall at this
    sitting whether it is or not. It certainly is not a major
12
    constituent.
13
                 So, I mean, I can't be more precise than
14
    that.
    BY MR. HULBURT:
15
16
           Q
                Okay. Let me have you turn to page 6 of the
    declaration and look at Table 1B. And I'm interested in
17
18
    whether -- this table says "Estimated" -- strike that.
19
                 I've gotten too many sentences mixed into one
20
    thought.
                 This table says, as entitled, "Estimated
21
    average residential exposures to specific Prop 65 chemical
23
    species present in ETS for California nonsmokers who live
    with a smoker."
24
25
                 Can you confirm, agree, dispute these average
    exposure numbers that are listed in the table for these
26
27
    chemicals?
28
                 MR. KODSI: Objection; vague, overbroad,
           Vail, Christians & Associates (619)544-8344
                                                               183
1
    compound.
                 THE WITNESS: No, I can't confirm or dispute
2
3
    any of them. The units that are listed are in terms of
    micrograms per day, and that is not a concentration. So
5
    this requires information to calculate this number beyond
    the concentration. And so there would have to be some
6
    other input assumptions. Without knowing what those are,
7
8
    I can't comment about these numbers. I'll leave it at
9
    that.
10
                 MR. KODSI: Counsel, would now be a good time
11
    for a break?
12
                 MR. HULBURT: Sure. If you want. Sure.
13
                 (Recess.)
14
    BY MR. HULBURT:
15
                Okay. Let me have you look at page 7 of this
    declaration of Dr. Nazaroff, paragraph 14. He describes
16
17
    what he calls a scenario which he refers to as "Case 1
    scenario." I just want to ask you to read this paragraph,
19
    and then the question is going to be whether you agree
20
    with his conclusion.
                 MR. KODSI: As I'm reading the paragraph, I'm
21
    going to object to that question as being vague, lacking
23
    foundation, and that the entire basis for the conclusion
24
    certainly isn't present in that paragraph.
25
                 But to the extent the doctor can answer your
26
    question, he's certainly free to do so.
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27 THE WITNESS: Well, I can't answer your 28 question, and I can't -- I can't agree with or disagree Vail, Christians & Associates (619)544-8344 184 with the statements made here, because -- well, for several reasons. One, the paragraph, as stated and as read, incorporates data from other places apparently in this document. I don't know that for a fact. In which data 5 also include assumptions that are not in those particular 6 7 tables. So I don't know what all the impact factors 8 are to reach these conclusions. So I'm not in a position 9 to agree with or disagree with this statement. 10 11 BY MR. HULBURT: 12 Q Okay. That's fair enough. I know and you 13 told me before that you didn't ever read this declaration. So have you ever heard anything about this 14 15 Case 1 scenario that Dr. Nazaroff developed? MR. KODSI: I'm going to object to just the continued questions about the Nazaroff declaration to the 17 extent it's a hearsay document which the doctor has 18 19 testified he's not seen prior to today. 20 But you're free to answer any questions that 21 are asked, to the extent you can. THE WITNESS: I've not seen this document, 22 23 and to my knowledge, I've not heard about this Case 1 24 scenario as it's described on this page. MR. HULBURT: Okay. 25 26 MR. KODSI: Just to save time, if you're 27 going to continue to ask questions about the document, 28 we'll stipulate that we'll have a hearsay objection when Vail, Christians & Associates (619)544-8344 185 1 you refer to the Nazaroff declaration. MR. HULBURT: That's fine. You can object to hearsay if you want. 3 BY MR. HULBURT: 5 Let me ask you to turn to page 9, paragraph 6 17. 7 I'll give you a chance to read the paragraph 8 and then ask you a couple questions about it. 9 A I've read paragraph 17. 10 Okay. I'm going to pick up at about line 8, where it says, "I conclude that 3 million people" -- do 11 12 you see that? 13 Α I do. 14 We've already talked about those numbers, about the 3 million and 1 million. So I don't want to do 15 16 that again. 17 But that sentence goes on to say, "and this population is exposed daily to at least three (and a 18 19 certain portion of this population as expressed in Case 1 20 is exposed to as many as seven) of these Prop 65 21 chemicals, where this daily exposure exceeds the no 22 significant risk level established by OEHHA for these 23 Prop 65 chemicals." 24 The chemicals -- that statement is kind of incomplete without knowing what chemicals. The chemicals 25 26 he's referring to are on the previous page, page 8, in the 27 table. 28 And so my question is do you agree with that, Vail, Christians & Associates (619)544-8344 186 1 with the conclusion that he states there? MR. KODSI: Objection; lack of foundation.

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THE WITNESS: There is no way that I can
4
   agree with this, because it assumes many things that I
   don't have knowledge of. I don't have -- I mean, the way
5
6 that this example was constructed. So I don't know
    whether these data support these conclusions or whether
    the calculations are correct or anything. I don't know
    what the input assumptions are, without having read this
9
10
    entire document.
    BY MR. HULBURT:
11
12
           Q Do you know whether there are any
13 constituents of ETS which do exist in concentrations in
14 California at a level that exceeds the no significant risk
   level of Prop 65?
15
                 MR. KODSI: Objection; lacks foundation.
16
                 THE WITNESS: I don't know what the no
17
    significant risk levels of Prop 65 are. So I have no way
18
19
   to answer that question.
20 BY MR. HULBURT:
21
               All right. So that's not an area that you've
     0
22 addressed in any way?
23
                 MR. KODSI: Objection; vague, argumentative.
                 THE WITNESS: Well, I won't say it's a
24
25
   question I haven't addressed in any way. Some of these
26
    chemicals -- whether or not they're the ones referred to
in this paragraph or not, I don't know. But some of the
28 chemicals in these tables are ones that we have measured.
           Vail, Christians & Associates (619)544-8344
                 I'm aware of measurements of some of these
1
    others that are in the literature. So, I mean, I'm aware
    of a portion of this hypothetical, but not in its entirety.
4
                 I don't know -- I don't know what Prop 65, no
5
   significant risk levels are. I have not reviewed that.
   Presumably, I could, and, you know, it would be in the
    area of my expertise to see what those are and how they
7
    relate to concentrations and exposures that have been
8
9
    measured.
10
                 But those aren't included in this paragraph.
    So I can't -- I can't comment as to whether -- you know,
11
    as to whether these data are consistent with this
12
13 conclusion or not.
14 BY MR. HULBURT:
15
                Do you agree that residential settings
16 strongly dominate overall ETS exposure?
                MR. KODSI: Objection; overbroad, incomplete
17
    hypothetical, vague, argumentative.
18
19
                 THE WITNESS: Is that a statement from this
    document that I -- I'm not -- I'm not sure whether I
20
21 should take that in the context of this document or as a
22 global statement.
23
    BY MR. HULBURT:
24
               I'm trying to throw it at you as a global
           Q
    statement. It is in the document. It's on page 13 of
25
26 paragraph 21. I'm just asking you the question whether
27
    you agree with that statement.
28
                 MR. KODSI: Same objections.
           Vail, Christians & Associates (619)544-8344
                                                              188
                 THE WITNESS: All right. I've read the
1
    paragraph.
                 Can you ask me a question again.
   BY MR. HULBURT:
4
5
           Q
                Yes.
                 Do you agree with his sentence that says,
    "With laws and regulations in California now severely
```

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restricting smoking in public buildings, residential
    settings strongly dominate overall ETS exposure,
10 accounting for approximately 60 to 80 percent of the
    average exposure of nonsmokers"?
                 MR. KODSI: Objection; compound, lacks
12
13
    foundation.
                 THE WITNESS: Well, to begin to address the
14
15
    question that's posed here or the statement that's posed
16
    here, I, as an exposure expert, would have to look at
    scenarios in which exposure could occur.
17
                 The suggestion in this paragraph is that by
18
19
    eliminating public exposure, residential settings are now
    the dominant source of overall exposure.
20
21
                 To the extent that residential settings
22
    included a smoker who smokes in the residence, that
23
    would -- I would tend to broadly agree with that. I mean,
    the residential setting is -- where there is a smoker
24
25
    would be the place or the venue in which a potentially
    exposed nonsmoker would spend the majority of their time.
27
                 And while this doesn't suggest by this
28
    language that that's -- the magnitude of that exposure.
           Vail, Christians & Associates (619)544-8344
                                                               189
    That just simply says most of the exposure would occur in
1
    the home, as I'm paraphrasing it, because smoking is
    basically not allowed in public places. On its face, that
    seems to be a reasonable statement, as I understand what
    he's saying there.
    BY MR. HULBURT:
7
                 You'll see on the next page at Figure 2 where
    he's got the little pie charts. He makes a reference to
9
    Miller et al., 1998 publication.
10
                 Are you familiar with that publication at
11
    all? There is a bibliography in the back if you need to
12
    look at that.
           Α
                 If you can point me to it.
13
14
                 Is it at the very end?
15
                 It is.
16
                 Do you know what number it is?
17
                 MR. KODSI: Actually, if you can allow me, I
18
   think I can --
19
                 MR. HULBURT: You both went too far back.
20
                 MR. KODSI: The C.V. is at the end of this
21
    document.
22
                 MR. HULBURT: It's on page 105.
23
                 THE WITNESS: I don't know that I'm familiar
24
    with this report as it's cited. I'm familiar with the
    effort. In fact, I had the occasion to communicate with
25
    one of these authors who presumably, as I understand it,
27
    in the course of doing this work, called me or one of my
28
    colleagues and requested some additional information from
           Vail, Christians & Associates (619)544-8344
                                                               190
    us, which we provided.
1
                 So I'm broadly familiar with that effort, but
    I don't know that I am with this citation. I'd have to
    see the exact document to know whether -- to be able to
5
    try to answer whether I've seen it or not.
    BY MR. HULBURT:
6
7
               Other than the Gilpin article that was sent
    to you by Mr. Kodsi, do you have any data with respect to
8
9
    California exposure to ETS --
10
                 MR. KODSI: Object as argumentative.
11
    BY MR. HULBURT:
12
           Q
                -- in the home?
```

13 I'm trying to recall what data I might have seen that would have been relevant to exposure in the home in California. I do not have any data from a study that R.J. Reynolds conducted that would be relevant to that. Do you have any studies that you're relying 17 18 on with respect to exposure to ETS in the home in California, other than the Gilpin article that we've 19 20 already talked about? That's a very broad question that I can't --21 A I cannot categorically say no to because many of the 22 studies that I rely upon, including ones that we have 23 conducted, including ones that others have conducted that 25 are listed in these various documents, have information 26 that is going to be relevant to exposure in homes in any 27 state, including California. 28 I'm not aware right at this moment that any Vail, Christians & Associates (619)544-8344 191 of those have California-specific information, but there 1 is certainly data and there is certainly information that's available that would be relevant to exposure in homes in California, yes. Although, it may not be specific to California, it would be relevant to exposures in homes in California. 7 Q Is the Gilpin article the only thing that you have that is specific to California? 8 9 MR. KODSI: Objection; overbroad. THE WITNESS: In the bibliography that's been 10 11 provided, there is a citation to a 16-city study that included as one of the cities, a city in California. I do 12 not have any data other than what is published in that 14 paper, but I know that has some California-specific 15 information in it. In one of our studies, although it wasn't 16 directly related to measuring airborne exposures to ETS, 17 it also included a city in California. But I don't 18 believe that paper has -- at my current recollection, I 19 don't believe that paper has any California-specific 20 information it. And without -- well, at this setting, ${\tt I'm}$ 21 simply not sure. There is certainly information that is 22 23 relevant to California. 24 Your question, as I understand it, is, is there any specific California information in it, and none comes to mind right at this moment. 26 BY MR. HULBURT: 27 28 All right. Let me have you turn to page 15 Vail, Christians & Associates (619)544-8344 192 in the Nazaroff declaration, on paragraph 24. It starts 1 talking about smoking in California. And it says -- Figure 3 shows that the current prevalence of smoking among California adults is 5 approximately 18 percent, down from approximately 26 percent in the mid 1980s. 7 Do you have any information that is -- can 8 you agree, disagree with those numbers? 9 I can't agree or disagree with those numbers. 10 You don't know one way or the other, as you sit here right now? 11 12 A No, I don't. 13 Do you have any information with respect to 14 the prevalence of smoking among California adults in 1999 15 and/or 2000? 16 A I cannot think of anything. The Gilpin 17 articles would be relevant to -- possibly would be

relevant to that, but they were published prior to '99 and could not have data relevant to the current year. So I can't think of anything that I'm aware of that would be 20 21 responsive to those two years. On page 16, paragraph 27, Dr. Nazaroff makes 23 a statement -- it's paragraph 27, line 17. It says, 24 "Thus, the large majority of cigarette smokers in 25 California smoke every day." 26 Do you know -- do you have any information to be able to say whether that is an accurate conclusion? 27 MR. KODSI: Objection; lacks foundation, 28 Vail, Christians & Associates (619)544-8344 193 vague, overbroad. 1 THE WITNESS: The frequency of smoking is, again, not my area of expertise. So I would not have an expert opinion on that point. 5 BY MR. HULBURT: All right. Paragraph 28, below there, at 6 7 line 21, he says, "the average California smoker consumes 8 almost 17 cigarettes per day, a little less than the 20 cigarettes in a pack." 9 Do you have any information to know whether 10 that's an accurate statement? 11 12 MR. KODSI: Same objections. THE WITNESS: Is your question overall, or is 13 14 it specifically the 1999 and 2000? I'm just trying to clarify what time frame I'm trying to think through. 15 BY MR. HULBURT: 16 Q I think the time frame is now. You know, 17 18 probably, the results of science would mean it's in the 19 most recent, two, three, four years, by the time something gets published. 20 Well, I guess that's my point. If you're 21 asking me about 1999 and 2000, the answer would be no because I'm not aware of any publications that could have 23 24 been published in that time frame that would be relevant 25 to data in that time frame. Okay. So how about before? 26 27 Okay. Well, if that was the limitation of Α 28 your question, then it was pretty easy. If you're asking Vail, Christians & Associates (619)544-8344 194 me before 1999, then I'd have to sit here and reflect on 1 it a little while. 3 Q I don't want to go too far before. Let's say '97, '98, if that makes a difference in your thought 5 process. 6 Sure. A few less years that I have to think 7 through. Certainly, I have conducted no studies that 9 would have data related to California smoking patterns in 10 the '97 to date time frame. 11 Q Are you aware of any? 12 And I'm -- I don't recall any of the Α 13 information that I've seen right at this point that has that type of information in it. Again, that's not to say it doesn't exist, but I simply can't recall it at this 15 16 point. All right. Let me ask you to turn to page 17 18, paragraph 35. I really want to pick up at line 5 18 19 where he says, "a behavioral study has shown that the distribution of cigarette smoking throughout the day tends 20 21 to be regular, suggesting that the proportion of the awake 22 hours spent at home is likely to be a good estimate of the

23 proportion of cigarettes smoked while at home." 24 Do you have any information regarding that 25 conclusion, the idea that a cigarette smoker is going to 26 smoke consistently through the day? Well, I believe the Gilpin articles do 27 28 contain information that's relevant to that point. Vail, Christians & Associates (619)544-8344 195 What do you know about that? 2 Α Well, the subject of those documents is the 3 smoking restrictions in the home, and the conclusions that I recall were that there was -- were a significant number of Californians who also restricted smoking in their 6 home. 7 So, certainly, for those individuals, the 8 number of hours spent at home would not be reflective of 9 the number of cigarettes smoked at home. So that data is not relevant. I'm not sure --10 11 The data in the Gilpin paper are relevant to 12 this point, and what I just answered incorrectly was 13 the -- I mean, the presumed association of the data, as indicated in this paragraph, would not be relevant if a 14 person doesn't smoke at home, which apparently a number of 15 Californians do not do. 16 17 And depending on the categorization, as given in those papers, there were some significant percentages 18 19 in certain categories of Californians who did not smoke at home or at least observe some sort of smoking restriction. 20 Let's read the next sentence, then. 21 22 It says, "Third, a 1992-93 telephone survey 23 revealed that 72 percent of California households in which a smoker resides permits smoking in some or all areas of 25 the home." 26 And he cites MMWR, 1997. 27 Do you know whether that's an accurate 28 conclusion? Vail, Christians & Associates (619)544-8344 196 1 No --And I want to talk about now, whether that's an accurate conclusion for describing California now, in 3 '99 and 2000. Well, I would say based on the Gilpin articles which were published more recently, that there's 6 7 indication that this would not be accurate for current day 8 California. 9 As to the accuracy of this statement as it's attributed to this citation, I don't know whether that's 10 11 an accurate reflection of these conclusions or not. 12 The last sentence of this paragraph says, 13 "most nonsmokers who live with smokers are regularly 14 exposed to environmental tobacco smoke in their homes." 15 Do you agree with that statement? 16 Well, this statement that you read, the 17 sentence begins with "Consequently." So I'm interpreting 18 this statement as a conclusion reached by this author from the foregoing details. 20 Right. And I asked it the way I did intentionally because I'm interested in your conclusion 21 based on whatever thought process you may use. I don't want you to -- I'm not asking you to determine whether he 24 used an appropriate thought process to get to his 25 conclusion. 26 But based on whatever thought process you 27 have, do you agree with this statement that most

nonsmokers who live with smokers are regularly exposed to Vail, Christians & Associates (619)544-8344 197 environmental tobacco smoke in their homes? 1 MR. CAFFERTY: Just to clarify, he's answering the question in his capacity as an expert, or you're asking him for an answer in his capacity as an expert? 6 MR. HULBURT: I am. THE WITNESS: I think that I would agree with 7 that statement, as you've read it. Again, the articles 8 that I've cited earlier suggest -- well, they show that 9 significant percentages of Californians have restrictions 10 and maybe even bans. But this question says "most," which 11 12 as a scientist, I would interpret to mean more than half. And I think that would be consistent with all of the data 13 14 with which I am aware. 15 So in a scenario in which a nonsmoker is living with a smoker and in a situation in which the 16 17 smoker smokes in the house in which the nonsmoker is 18 living, which is not necessarily a foregone conclusion, I 19 think -- and to the extent that they are there together on 20 a regular basis, then, yes, this statement, as you 21 proposed, would be something I could agree with. 22 BY MR. HULBURT: 23 All right. Let's go to page 21, paragraph Q 24 43, where he writes, "For nonsmoking adults who reported being exposed, the average duration of all activities with others smoking was 141 minutes per day. For exposed 26 children, the corresponding average was 202 minutes per 27 28 day." Vail, Christians & Associates (619)544-8344 198 Maybe we need to split that in two 1 But my question of you is do you have an opinion as to whether these times are accurate, or even 5 better, do you have an opinion as to the average duration 6 in a day when nonsmokers in California are exposed to the 7 smoker? 8 MR. KODSI: I'm going to object to that as 9 vague and as an incomplete hypothetical. 10 THE WITNESS: The first citation here is to 11 Robinson et al., 1996, which I presume is the CAP, C-A-P. Although, that year is a little late. I do recall 12 reviewing CAP studies authored by a person named Robinson 13 that would predate that. And I recall that there were --15 at least at this sitting, my recollection is that there were some significant issues with the way that these 16 17 authors measured duration of exposure. And, in fact, even in the footnote to this 18 citation, that Nazaroff says that that study inaccurately 19 20 refers to certain metrics. So I think that there would be -- based on my 21 22 own remembrance of CAP study and Robinson as the author 23 and looking at these metrics and Nazaroff's notation that there are some inaccuracies there, I think one would have to look at these data pretty skeptically to see if they are valid for this purpose or not. 26 27 BY MR. HULBURT: 28 The comment that Nazaroff makes in the Vail, Christians & Associates (619)544-8344 199 footnote there is that the Robinson study only counted the 1 time that the nonsmoker is in the presence of the smoking smoker and not the idea that the smoker might leave the

room and the smoke remain behind. Right? Is that how you read, as a scientist, 5 6 the criticism that he's raising regarding the technique? 7 MR. KODSI: Objection; calls for 8 speculation. 9 MR. CAFFERTY: I'm also going to object as an unfair question. The witness has testified repeatedly 10 11 that he hasn't read this document and now you're asking him questions which require him to understand the context 12 in which these statements were made. 13 14 BY MR. HULBURT: 15 Yeah. I'm asking you a question, because you're the obvious best person in the room to read 16 17 something like that and understand exactly what it means. 18 And so do you read this to be a comment that 19 they didn't factor the time that the nonsmoker would be exposed to the ETS, even after the smoker leaves the 20 21 room? 22 MR. KODSI: Object to that as argumentative 23 and, again, calls for speculation. 24 THE WITNESS: As stated, that's what this sentence suggests. My memory of the Robinson and CAP 25 studies is exactly the opposite, that what they counted 26 27 was the number of minutes per day that the nonsmoker was in the presence of the smoker, without regard to whether 28 Vail, Christians & Associates (619)544-8344 200 the smoker was smoking or not, which is, in fact, the opposite problem. So without reviewing all of this, including the citations, in much more detail, I stand by my previous 5 answer, which is I would approach this with some skepticism. You'd have to dig into this with more detail 6 to see whether this is valid or not. 7 BY MR. HULBURT: 9 Do you have an opinion as to how much time or Q 10 what is the average duration that a nonsmoker is exposed 11 to a smoking smoker, and if it makes a difference, let's separate adults from children. 12 13 MR. KODSI: Still an incomplete 14 hypothetical. 15 THE WITNESS: I think I would have knowledge that would allow me to possibly make some estimates based 16 on my prior work and review of some literatures that I've 17 conducted. But I do not have a number, and I have not 18 19 formulated a number that I can give you at this point 20 that's responsive to that. BY MR. HULBURT: 21 22 So as you sit here right now, you have no opinion that you can give me on that question? 23 24 A I have not gone through the mental process of 25 trying to construct that number. No, I am not. Is that true for both adults and children? 26 Q 27 That's true. Α 28 Are you familiar with the Wiley article Vail, Christians & Associates (619)544-8344 201 that's cited there, related to children? 1 MR. KODSI: Counsel, it's almost 5:15, if we can reach a wrapup point. THE WITNESS: Well, that citation is also to 5 a final report for the California Air Resources Board, and I have some remembrances of contact with the California 7 Air Resources Board. But that citation does not ring a bell. However, having seeing it might make a difference.

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    That citation doesn't help me identify it in my mind, no.
                 MR. HULBURT: Okay. Okay. We have agreed
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11 that I would try to stop at 5 o'clock. It's after 5
12
    o'clock.
                 So we'll stop for today and recess until
13
14
    tomorrow. Obviously, the deposition is not completed.
15
                 Do we have a standard stipulation for these
16
    that we're doing with the transcripts in between?
17
                 I've had a whole bunch of standard
18 stipulations in retailer depos, but not with the tobacco
    defendants. So I don't know that I've been in a depo with
19
20
    you guys.
21
                 MR. MILES: What to do with the depo?
22
                 MR. HULBURT: I'm not sure.
                 MR. KODSI: Some stipulation right now with
23
24
    respect to the transcript.
                 MR. MILES: I don't know what the stipulation
25
26
   is you're proposing. So we've never agreed to anything in
27
    the past of how to handle a depo that ends one day and
28
    reconvenes the next day as to what is going to happen with
           Vail, Christians & Associates (619)544-8344
                                                               202
    that transcript.
                 MR. HULBURT: That's what I was asking.
3
                 MR. MILES: I'm not aware of any agreement.
   If there's something you wanted to propose, I'd consider
    it. But, presumably, the transcript from today and
6
    tomorrow will be presented to the witness at the same time
7
    for review and signature.
8
                 MR. HULBURT: That's fine.
9
                 (Whereupon, at 5:13 p.m. the proceedings
10
    were adjourned.)
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              I hereby declare under penalty of perjury that
    the foregoing is my deposition under oath; that these are
    the questions asked of me and my answers thereto; that I
    have read my deposition and have made the necessary
    corrections, additions or changes to my answers that I
6
    deem necessary.
             In witness thereof, I hereby subscribe my name,
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    this _____ day of _____ 2000.
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                          Michael W. Ogden, Ph.D.
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   STATE OF CALIFORNIA )
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                          : SS.
    COUNTY OF SAN DIEGO
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         I, Margaret A. Smith, CSR No. 9733, hereby certify
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    that I reported in shorthand the above proceedings on
    Wednesday, July 12, 2000, at 550 West C Street, Suite
    1440, in the City of San Diego, County of San Diego, State
7
8
   of California; and I do further certify that the above and
9
   foregoing pages, numbered from 5 to 203, inclusive,
    contain a true and correct transcript of all said
10
11 proceedings.
       DATED: JULY 25, 2000.
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                                  MARGARET A. SMITH
                                  CSR NO. 9733
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